...OLOGY DEPT.
PUBLIC LIBRARY
JUN 10 19
DETROIT

Modern LITHOGRAPHY

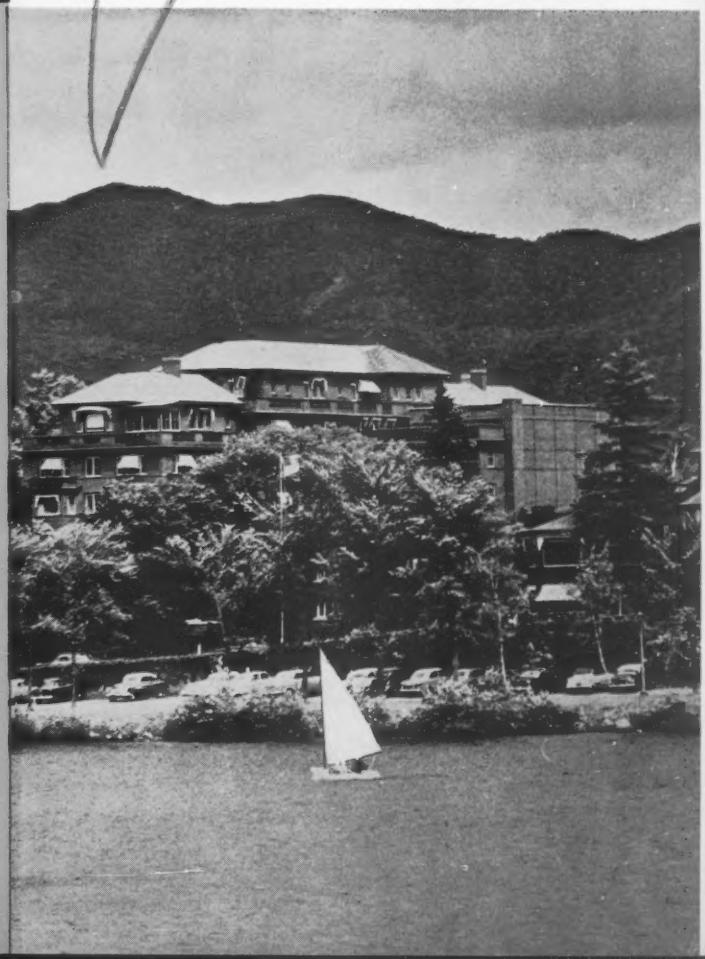
In this issue

LNA To Lake Placid

NALC Report

Expanding Your Plant

TAGA, R&E Reports



Fast Orange 47P

Senelith Inks

were the first lithographic inks

made from dyestuffs

treated with sodium tungstate

for better sunfastness

and are still leading

with their outstanding resistance properties

Our booklet "Inks, Lithographic and Printing" may be obtained on request

The Senefelder Company, Inc.

"Everything for Lithography"

32-34 Greene Street New York 13, N. Y.

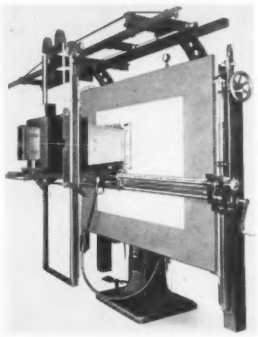
LANSTON MONOTYPE and ROBERTS & PORTER

are happy to ANNOUNCE

New Vertical Type M-H Photo-Composing Machine for Precision Work

MADE IN FOUR SIZES

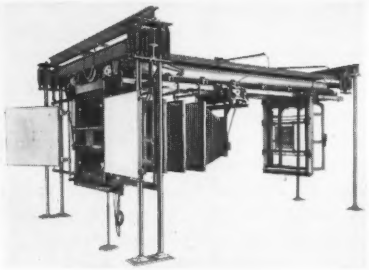
	Size of Platen	Work Area
Model M-H 2	44 x 50"	30 x 43"
Model M-H 3	58 x 68"	41 x 54"
Model M-H 4	64 x 80"	46 x 68"
Model M-H 6	80 x 104"	54 x 76"



M-H Precision Overhead Camera

MADE IN SIX STANDARD SIZES

24" x 24"	48" x 40"
30" x 24"	40" x 48"
40" x 40"	48" x 48"

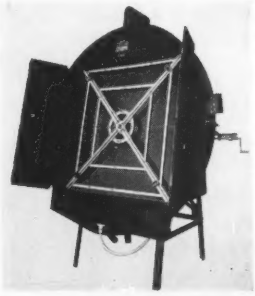


M-H Vertical Plate-Coating Machine
Standard Model—92-inch Casing Open

MADE TO COAT PLATES OF SEVEN SIZES:

*6x8 inches to 24x26 inches
6x8 inches to 29x39 inches
6x8 inches to 36x46 inches
6x8 inches to 47x57 inches
6x8 inches to 55x72 inches
6x8 inches to 54x77 inches
6x8 inches to 58x77 inches

*Cannot be adapted to gelatin solutions



. . . the appointment effective immediately of the Roberts & Porter organization, with sales and service facilities and warehouses strategically located in all leading cities, as national distributors of all photo-mechanical and plate-making equipment manufactured by the Lanston Monotype Corporation for lithography, gravure, photo-engraving and related graphic arts industries.

This appointment now enables Lanston Monotype Corporation and Roberts & Porter, Inc., to provide prompt local service by experienced shop-trained personnel, skilled in modern photo-mechanical and plate-making production, for *all* the graphic arts.

The coupon below, addressed to Roberts & Porter, will bring you the latest prices and information about the newest designs and advances in photo-mechanical and plate-making equipment.

Demonstrations may be arranged on request.

Mail the coupon today for prices and literature.

General Offices: 555 West Adams St., CHICAGO

SEND COUPON

NEW YORK
622-626 Greenwich

BOSTON
88 Broad St.

DETROIT
1025 Brush St.

BALTIMORE
5 South Gay St.

CINCINNATI
229 E. 6th St.

KANSAS CITY
1434 Wyandotte St.

LOS ANGELES
344 N. Vermont Ave.

CLEVELAND
1825 East 18th St.

. . . for prices and descriptive literature

SAN FRANCISCO
1185 Howard St.

PHILADELPHIA
1205 Hamilton St.

Roberts & Porter, Inc.
622-626 Greenwich St.
New York, N.Y.

Please send prices and literature on Lanston Monotype equipment

NAME_____

COMPANY_____

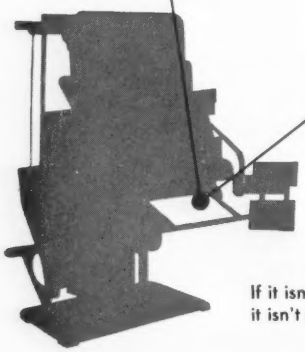
ADDRESS_____

CITY_____

Fotosetter Catalina
Fotosetter Catalina

From the keyboard . . .

Another Intertype First!



If it isn't made by Intertype
it isn't a FOTOSETTER.

The trend to a spontaneous hand-lettered effect in types for advertising display is exemplified in Fotosetter Catalina.

Emil Klumpp, prominent graphic designer and lettering artist, created this new brush-script and dubbed it Catalina for its gay, bouncy, holiday air.

Not only is this an up-to-the-minute face in design conception, but it offers for the first time a unique utility feature in keyboard composition of joining scripts. A word or a line of Catalina may be set tight or opened in justification between letters, within limits, to a given length—and still join perfectly! At long last, here is the "rubber type" which typographers have sought to "make the measure".

Truly, here is a fluid new type for use on the composing machine offering the greatest flexibility—the Intertype Fotosetter.

AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz

AABCDEFGHIJKLMNOPQRSTUVWXYZ

abbcdeffghijklmnopqrstuvwxyz

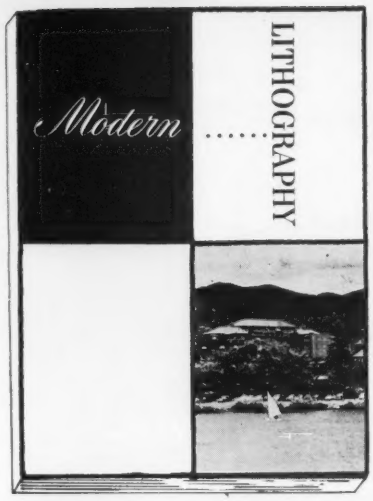
1234567890$¢£&.,:;-!?''()[]*-

Intertype Corporation

360 Furman Street, Brooklyn 1, New York

Chicago, San Francisco, Los Angeles, New Orleans, Boston
In Canada: Toronto Type Foundry Co. Ltd., Toronto, Montreal, Winnipeg, Vancouver, Halifax

FOTOSETTER is a registered trademark • Fotosetter Catalina and Futura families.



COVER

Behind this tranquil scene members of Lithographers National Association will hold busy meetings June 20-22 in their 50th Anniversary Convention. Headquarters is the Lake Placid Club, Essex County, N. Y. See program, page 38.

WAYNE E. DORLAND
Editor

RALPH E. DORLAND
Advertising Manager

CHICAGO OFFICE
333 North Michigan Ave.

Member of... LITHOGRAPHIC TECHNICAL FOUNDATION

AUDITED PAID CIRCULATION ABC

Feature Articles

LNA To Meet At Lake Placid 38

NALC Convention Report 40

When You Outgrow Your Presses 43
By Lawrence Littman

Paper for Offset: Part 3 47
By R. H. Doughty

Litho Wins AIGA Awards 49

TAGA Meets in Boston 50

R & E Meeting Report 52

3-Color Symposium 54

Packaging for Super Market Age 56
By Gerald Stahl

Departments

Guest Editorial 37

TAGA Report: Dot Area 63
By D. J. Howe et al

Metal Decorating Section

Epoxy Coatings 77
By M. A. Glaser

Technical Briefs 81

Photographic Clinic 95
By Herbert P. Paschel

News About the Trade 96

Thru the Glass 115

Meeting Calendar 118

Litho Club News 123

Equipment, Supplies, Services 130

Classified Advertisements 155

Index to Advertisements 159

Tale Ends 160

MODERN LITHOGRAPHY

VOLUME 23, NUMBER 6 JUNE, 1955

SUBSCRIPTION RATES: *One year, $3.00; two years, $5.00. Canada and Pan America, one year, $4.00; two years, $7.00. Foreign, one year, $7.00; two years, $12.00. Group subscriptions (U. S. only) Four or more entered as a group. $2.00 each. (May be sent to different addresses.)*

Published monthly on the 5th by Industry Publications, Inc., 229 W. 28th St., New York, N. Y. Advertising, Subscription and Editorial Office, Box 31, Caldwell, N. J. Advertising rates made known on application. Closing date for copy—10th of the month preceding month of issue. Reentered as Second Class Matter May 12, 1953, at the Post Office at New York, N. Y., under the Act of March 3, 1879.

Address all correspondence to Box 31, Caldwell, N. J.

NOW— COAST to COAST

Twelve (12) completely modern ink factories—manned and equipped to serve you quickly, correctly —and economically.

Flint Inks

Founded 1920

Howard Flint Ink Co.

Gravure • Letterpress • Lithographic • Flexographic

ATLANTA • CHICAGO • CLEVELAND • DENVER • DETROIT • HOUSTON
INDIANAPOLIS • LOS ANGELES • MINNEAPOLIS • NEW ORLEANS • NEW YORK • TULSA

a greeting from Gibson that Lawson welcomes!

GIBSON Greetings

THE GIBSON ART COMPANY CINCINNATI 1

E. P. Lawson Co.
628 So. Dearborn St.
Chicago, Ill.

March 15, 1955

Gentlemen: —

We of the Gibson Art Company have recently installed a third Lawson 52" Heavy Duty Hydraulic Clamp Cutter. Our conclusion is, after operating two of the same machines for 3 years, they meet our exacting demands for precision cutting.

The performance and ease of operation coupled with the uniformity of clamping pressure which is due to the use of hydraulics, greatly increases our efficiency in accuracy and production.

Again, may we say, that we are completely satisfied with the all-over performance of the Lawson Cutters.

Very truly yours,
THE GIBSON ART COMPANY
Harry J. Connell
Supt. of Printing Dept.

LAWSON 52" CUTTER
HYDRAULIC CLAMP
(PATENTED)

Gibson Art Company of Cincinnati, Ohio have earned the reputation for outstanding greeting card production. When they inform us that their 3 Lawson Heavy Duty Hydraulic Clamp Cutters *"meet our exacting demands for precision cutting"* . . . and our equipment *"greatly increases our efficiency in accuracy and production"*, they have provided us with the kind of greeting that rewards our efforts in the pioneering and development of successful hydraulic clamp cutters.

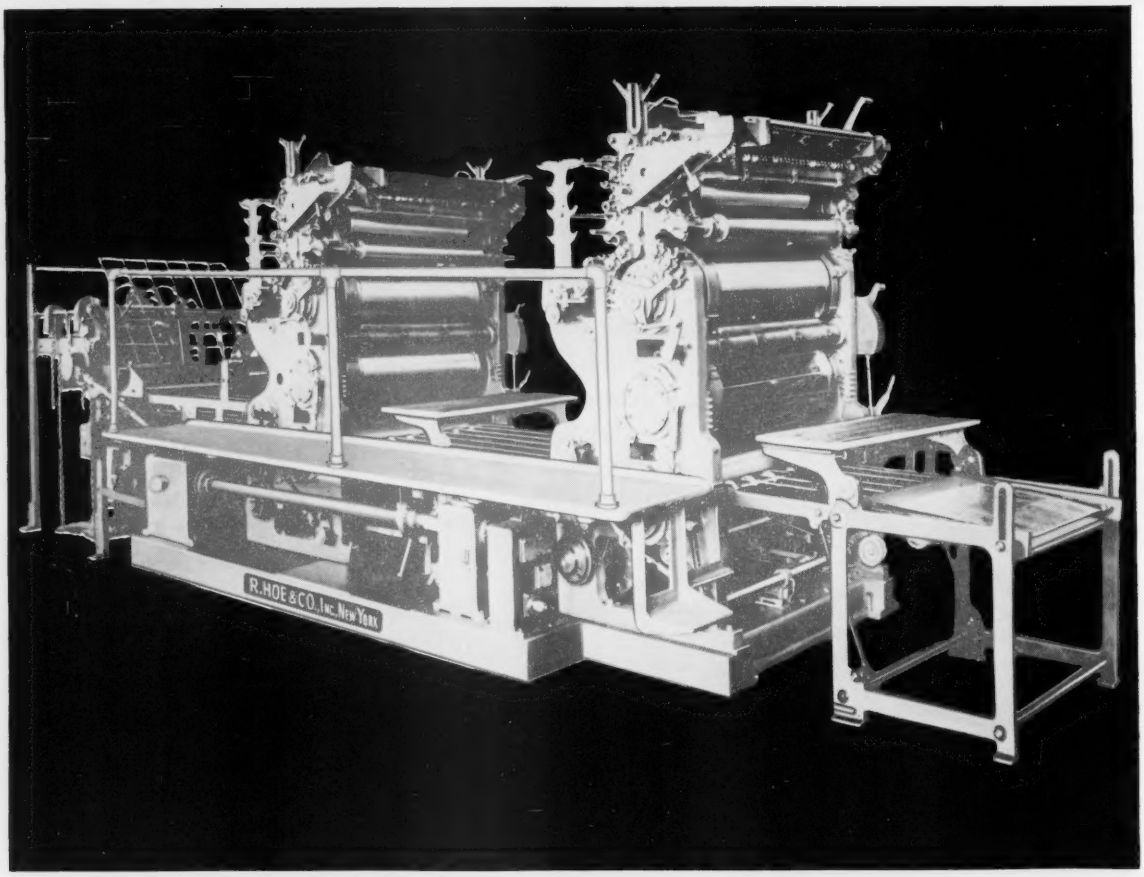
Write today for illustrated Folder on 39", 46" and 52" Cutters also Rapid 3-Knife Trimmer and Multiple Head Drill

E. P. LAWSON CO. main office: 426 WEST 33rd ST., NEW YORK 1.

CHICAGO: 628 SO. DEARBORN ST. BOSTON: 176 FEDERAL ST. PHILADELPHIA: BOURSE BUILDING

EXCLUSIVE DISTRIBUTORS SALES AND SERVICE

HARRY W. BRINTNALL CO. **Los Angeles, San Francisco, Seattle** A. E. HEINSOHN PRTG. MACH. **Denver** SEARS LTD. **Toronto, Montreal, Winnipeg, Vancouver** SOUTHEASTERN PRINTERS SUPPLY CO. **Atlanta** WESTERN NEWSPAPER UNION **Tulsa, Little Rock, Okla. City, Shreveport** E. C. PALMER & CO. **Dallas, Houston, New Orleans**



HOE METAL DECORATING PRESSES

are rigidly constructed, well balanced machines without excessive weight . . . easy to operate . . . with no complicated mechanisms . . . all working parts readily accessible . . . and both single and multi-unit presses are exceptionally compact, requiring minimum floor space.

With the HOE straight-line-feed design, the automatically fed metal sheet is carried on a horizontal plane to the impression grippers, permitting the most exact control of the sheet throughout its travel and assuring precision registration at much higher operating speeds than ever previously was possible. And in multi-unit presses the platform is on one level, greatly facilitating the operator's work.

Over-all dimensions of 34" x 36" sheet presses, including feeder and delivery stand:

	Length	Width	Height
Single-unit press	207"	114"	97"
Two-unit Tandem press	301"	114"	97"

Write for more complete information, including the wide range of sizes that can be furnished in either single or multi-unit presses.

R. HOE & CO., INC.

910 East 138th Street New York 54, N.Y.

BRANCHES: BOSTON • CHICAGO • SAN FRANCISCO
BIRMINGHAM • PORTLAND, ORE.

GO . . .

FROM BLACK TO YELLOW

IN LESS THAN 10 MINUTES!

LITTLE BENJY 1-STEP WASH-UP SOLVENT

New formula cleans rollers faster, safer, better, than any other method

Here, after 2½ years of research at Knox Soap Company, is the wash-up solvent you've been waiting for! Average wash-up takes but a few minutes, and the toughest of all, from black to yellow, can be whipped in less than ten minutes under typical, normal pressroom conditions. Laboratory comparative tests show Little Benjy to be 70% more efficient in cleaning than old 3-step methods.

Little Benjy will not damage plates, and is safe for all types of rollers. It is non-toxic for all practical purposes, there's no greasy residue, no unpleasant odors. High flash point meets safety requirements of every city in the United States. (Tagliabue open cup flash point, modified to meet requirements of Central Testing Laboratory, City of New York — 152° F.)

Rollers are restored to original condition. Pigments, glaze, and gum left deep in the rollers by other solvents are completely removed. When you use Little Benjy, presses run cleaner, down-time is greatly reduced for wash-ups and all but eliminated for roller conditioning.

KNOX SOAP COMPANY

Write for Free Sample

3300-22 WEST CERMAK ROAD-CHICAGO 23, ILLINOIS, U.S.A.

PREFERRED BY LITHOGRAPHERS

Mort

(the original)

DAMPENER CLEANER

Patented in U.S.A. and foreign countries.

here's why:

- Dampeners are THOROUGHLY CLEANED with less wear to coverings.
- Patented method of driving rollers.
- Specially designed grooving in cleaning rollers.
- Water-sealed anti-friction bearing housings assure longer operating life free of mechanical trouble.

FIVE SIZES: Only one Mort Dampener Cleaner is needed to wash *all* dampeners. Size required is determined by the overall length of core of longest dampener (including spindles). You can then wash all dampeners down to the smallest size... WITHOUT ADJUSTMENTS.

Saves: 50% in materials... 75% in labor.

Mort

DOWN DRAFT TABLE WITH DUAL FANS

Specially engineered for zinc, aluminum and all other types of multi-metal plates.

DUAL FANS (available on three larger sizes) provide a uniform flow of air from all sides of table. Workmen have maximum protection from inhalation of chemical and metal fumes.

SPECIAL COATING protects table from acids used in the developing process for litho plates.

ACID PROTECTED FLEXIBLE COVERING easily follows expansion and contraction... a NON CONDUCTOR of electricity... resistant to electrolic corrosion.

QUIET... FREE OF VIBRATION

WRITE TODAY for complete details

RALPH H. MORT COMPANY

Four sizes available:

38 x 48 inches—Single Fan
48 x 60 inches—Dual Fans
60 x 72 inches—Dual Fans
72 x 86 inches—Dual Fans

Customer has option to purchase island at his local dealer to save freight and breakage.

102 N. W. NINTH AVENUE • PORTLAND 9, OREGON

☆ Memorable American Letters... ☆
"We pay a pretty sum," writes Robert R. Livingston to his brother Edward, on May 7, 1803. "but we have 20 years to pay it in." The "pretty sum"—$15 million—was the price he and James Monroe had agreed to pay France for ceding Louisiana. The famous purchase, negotiated in Paris, added to this young nation an area stretching from Mexico to Canada, and from the Mississippi to the Rockies.
Courtesy The New York Historical Society
Today's Businessmen Choose MEAD BOND
Every letter that leaves your desk helps create an impression of you and a character for your firm. A tangible part of this total impression is the letterhead you use. As such, it should reflect dignity and substance in every fiber. Mead Bond—crisp, clean paper, genuinely watermarked for your protection, has long been the choice of American businessmen. Your printer or lithographer—backed by leading paper merchants—knows it as America's finest fiber-blended bond. Ask to see convincing evidence. Ask, too, about the other famous Business Papers made by Mead.
MEAD papers
THE MEAD CORPORATION
"Paper Makers to America"
Sales Offices: The Mead Sales Company, 118 West First Street, Dayton 2, Ohio • New York • Chicago • Boston • Philadelphia • Atlanta

This full-page advertisement has been seen by the readers of *Time* and of *U.S. News & World Report*

ADVERTISING THAT HELPS YOU SELL

Mead Papers mean business . . . for merchants, merchant-salesmen, printers, lithographers and advertisers. Making Mead Papers unforgettable in the minds of your customers—all who buy and specify paper products—is the job being done through our national advertising. Remember, Mead Papers mean business for you.

Trojan 3D GUMMED PAPER

The greatest improvement in gummed printing paper in many years

A
Complete Line of
Gummed Printing Papers
in Sheets and Rolls

LABEL PAPERS
STAMP PAPERS
LAMINATED FOILS
LAMINATED PAPERS
LAMINATED FABRICS
HEAT SEAL PAPERS
HEAT SEAL FOILS

3D is the designation of Gummed Products' revolutionary new method of processing (*patent pending*) Trojan Gummed Printing Paper. Developed and perfected after extensive research, the 3D Processing improves the characteristics of the papers which benefit printers and lithographers.

TROJAN 3D gummed papers lie flat over a wider range of relative humidity than papers processed by usual methods. They also make possible quicker feeding, delivery and jogging. As for printing qualities, it's hard to believe that so much better reproduction and superlative printing results can be had with this new and exclusive processing procedure.

You must try TROJAN 3D on your own presses in order to appreciate the truly revolutionary change in the processing, and the results you can obtain. You can see this for yourself, don't take our word! Let us send you some sample sheets or a small trial order for your test. Write today.

The GUMMED PRODUCTS Company

. . . Specialists in the gumming of printing papers and sealing tapes

Main Offices and Mills: **TROY, OHIO** — *Sales Offices: Atlanta, Chicago, Cincinnati, Cleveland, Los Angeles, New York, Philadelphia, St. Louis, San Francisco — Distributors from coast to coast.*

American Inks
Chemical Color & Supply Inks
Eagle Inks

famous brands...

Fuchs & Lang Inks
Kelly Inks
Morrill Inks
Sigmund Ullman Inks

from a single source...

G P I

We are organized for one purpose . . . to better serve the Graphic Arts industry. Now, no matter what your ink problem, you'll find a one-source, one-call answer at G P I. Contact our nearest office—we are in most phone books.

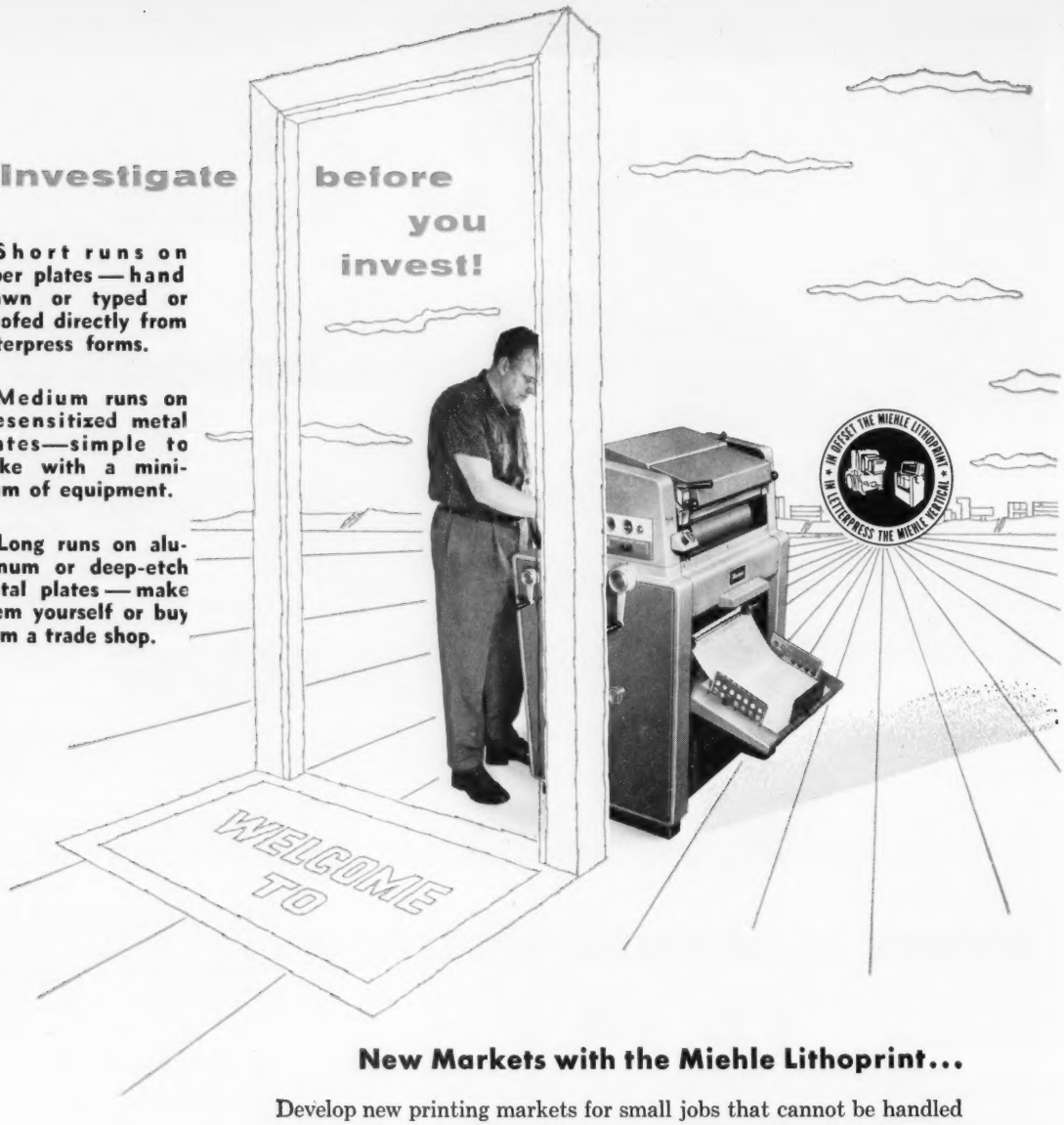
A Division of Sun *Chemical Corporation*

Chicago
Cincinnati
Clearing, Ill.
Cleveland
E. Rutherford, N. J.
Fort Worth
Kalamazoo
London, Canada
Long Island City
Los Angeles
Milwaukee
Mt. Morris, Ill.
Montreal
North Bergen, N. J.
Norwood, Mass.
Philadelphia
San Francisco
St. Louis
St. Paul
Tacuba, Mexico
Toronto

GPI **General Printing Ink Company**

10th Street and 44th Avenue, Long Island City 1, N. Y.

DIVISIONS OF SUN CHEMICAL CORPORATION
HORN • **HUDSON** • **WILLEY** (paints, maintenance and construction materials, industrial coatings) • **WARWICK** (textile and industrial chemicals) • **WARWICK WAX** (refiners of specialty waxes) • **RUTHERFORD** (lithographic equipment) • **SUN SUPPLY** (lithographic supplies) • **GENERAL PRINTING INK** (Sigmund Ullman • Fuchs & Lang • Eagle • American • Kelly • Chemical Color & Supply Inks) • **MORRILL** (news inks) • and **ELECTRO-TECHNICAL PRODUCTS** (coatings and plastics)



* **Short runs on paper plates — hand drawn or typed or proofed directly from letterpress forms.**

* **Medium runs on presensitized metal plates—simple to make with a minimum of equipment.**

* **Long runs on aluminum or deep-etch metal plates — make them yourself or buy from a trade shop.**

New Markets with the Miehle Lithoprint...

Develop new printing markets for small jobs that cannot be handled economically on your present equipment. Investigate the time saving features of the Miehle Lithoprint plus simplified offset plate making techniques. This combination will enable you to produce profitably a wide range of small jobs—everything from very short runs of reprints to fairly long runs of good quality color advertising. Ask for the full story.

Sheet Size 14 x 20" • Design Size 13 x 17¼" • Speeds up to 5000

The Miehle PRINTING PRESS & MANUFACTURING COMPANY
Chicago 8, Illinois

Leader among the world's manufacturers of fine printing equipment

Get the big improvements

1st in mercury blankets

Today, as always, Rapid Roller Company operates America's finest and most modern blanket manufacturing plant, as well as one of the largest research laboratories in the Graphic Arts Industry. This manufacturing plant, located in Chicago, is staffed with the best skilled craftsmen in the field, thereby assuring that Mercury Blankets will always be the first with any major improvements and the highest in quality.

RAPID ROLLER CO.

FEDERAL AT 26TH ST. • CHICAGO 16, ILL.

Eastern Office: 800 McCarter Highway • Newark 5, N. J.

IMPORTANT: THERE ARE *NO OTHER* RAPID ROLLER COMPANY BRANCHES OR FACTORIES.

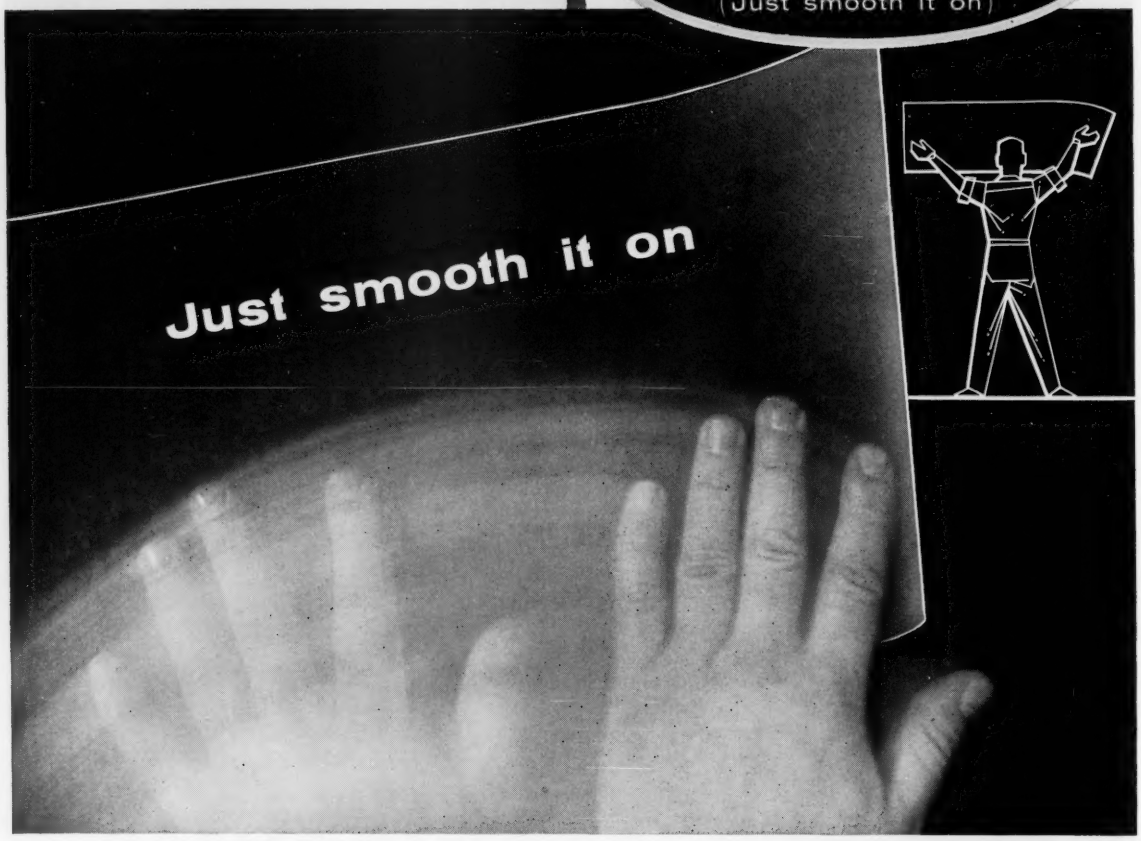
Announcing...

NEW M-J DRY-STIK

...the label paper line of self-adhesives

- Just peel off protective backing and smooth it on.
- Quick tack. No drying time. Sticks to any hard, smooth surface. Won't slip out of position.
- Resists heat, cold, time. Removes easily. No scratching or scraping.

M-J DRY-STIK
(Just smooth it on)



McLaurin-Jones now offers you new M-J DRY-STIK self-adhesive on its line of label papers. This means you can increase your label business. Why? Because you can offer your label and point-of-sale customers jobs with this type of adhesive on established label printing surfaces.

M-J DRY-STIK gives you easier printing, too, because you'll be printing on a proven label paper line. No new production problems. THIS self-adhesive stock has been run by offset, letterpress and silk screen.

As the country's oldest manufacturer of Gummed, Heat Seal, and Specialty Label Papers, we are proud to announce the addition of this new M-J DRY-STIK line.

Get full information and samples of new M-J DRY-STIK from your McLaurin-Jones fine paper merchant. Or write us direct.

McLAURIN-JONES COMPANY
HEADQUARTERS: BROOKFIELD, MASSACHUSETTS
Offices: New York, Chicago, Cincinnati, Los Angeles
Mills: Brookfield and Ware, Mass., Homer, La.

McLAURIN-JONES LABEL PAPERS

SAFEGUARD HANDS

from ALL harmful irritants

with KERODEX®

NOW supplied by **PITMAN**

An invisible, flexible coating of KERODEX skin cream protects hands from *all* harmful irritants encountered in the graphic arts . . . provides an impenetrable barrier against attacks on hands and other sensitive skin areas.

KERODEX is the most effective protective cream available—its unique formulation the final result of many years of research and in-plant testing.

KERODEX is easy to work with, takes only a few seconds to apply.

KERODEX does not affect materials . . . costs only a few cents a day to use.

Two types:—**KERODEX #71** for protection against water soluble acids, chromates, including chromic acid, and alkalies; **KERODEX #51** for protection against solvents and other water insoluble irritants. Both types in 4 oz. tubes and in economical 1 lb. and 8 lb. containers.

Pitman for all Graphic Arts needs

For extra safety, order KERODEX in the type and size you prefer . . . today! . . . from your nearest Pitman office

Distributed by

HAROLD M. PITMAN COMPANY

Chicago 50, Illinois—33rd Street & 51st Avenue
North Bergen, New Jersey—1110 13th Street
Cleveland 11, Ohio—3501 W. 140th Street
New York 36, New York—230 W. 41st Street
Boston 10, Massachusetts—266 Summer Street—Pitman Sales Co.

SINVALCO *Chemicals*

SINVALCO Deep-Etch Coating Solution #1 RM

For the finest work, requiring perfect reproduction, the country's most meticulous deep-etch platemakers use Sinvalco Deep-Etch Coating. They have learned from actual experience that this coating affords them the best results time after time.

SINVALCO Deep-Etch Developing Solutions #3 and #35

Sinvalco Deep-Etch Developers are manufactured to operate under the varying temperature and humidity conditions found in day-to-day lithographic shop operation. They preserve even the slightest differences in tone value, and the finest detail present in halftones and vignettes.

FOR DEEP-ETCH PLATES

SINVALCO Deep-Etch Solutions for Zinc #4, #30 and Aluminum #5

Used for zinc and aluminum deep-etch plates, these solutions leave no crystalline deposit and minimize fuming. They permit uniform, smooth etching by giving the operator more working time.

SINVALCO Deep-Etch Lacquer #18

An improved lacquer with ideal working and performance properties, Sinvalco Deep-Etch Lacquer has unusual resistance to blinding and streaking. Featuring stronger adhesion, improved ink receptivity, abrasion and chemical resistance, it is highly recommended for its performance when used on zinc and aluminum plates.

SINVALCO Deep-Etch Developing Ink #38

Sinvalco Deep-Etch Developing Ink protects the lacquer image with a black, waterproof and highly acid-resisting covering. It eliminates smear or drag from the non-image area and will not dissolve in warm water during the removal of the stencil. The controlled rate of evaporation allows time for large plates to be covered smoothly, then fanned dry quickly.

These are but a few of the many standardized, high quality chemicals S&V manufacturers in accordance with its constant aim of supplying the finest in graphic arts products. Using time-tested formulas and employing a rigid system of quality control, S&V produces a long list of Sinvalco chemicals that assure the lithographer of top efficiency and superior results on every job.

S&V

THE LITHO CHEMICAL DIVISION OF

Sinclair and Valentine Co.

Main office and factory: 611 West 129th St., New York 27, N. Y.

OVER 35 BRANCHES PROVIDE SERVICE FROM COAST TO COAST

Stands out like a "*you-know-what!*"

SOMETIMES we wonder why more people don't use HOWARD colors to liven business correspondence.

The cooler colors are distinguished as all get-out—and the brighter ones can often be keyed to the kind of business you're in. Russet, for instance, would be a knock-out for a candy company. And cherry—is there a jelly packer in the house? And all the rest of the colors—twelve in all—fit just as fine with many other kinds of business. And every one is a stand-out in the morning mail, which is so predominantly white.

Think it over with a HOWARD Sample book in hand. Your printer or paper merchant will give you one. Then if you still want white, he'll be glad to take your order for business stationery done on HOWARD BOND *whitest* white. But at least consider the possibility of distinguishing your business correspondence with letterheads and envelopes printed on a HOWARD stand-out color.

* * *

PRINTERS! *This message appears in advertising magazines read by your customers.*

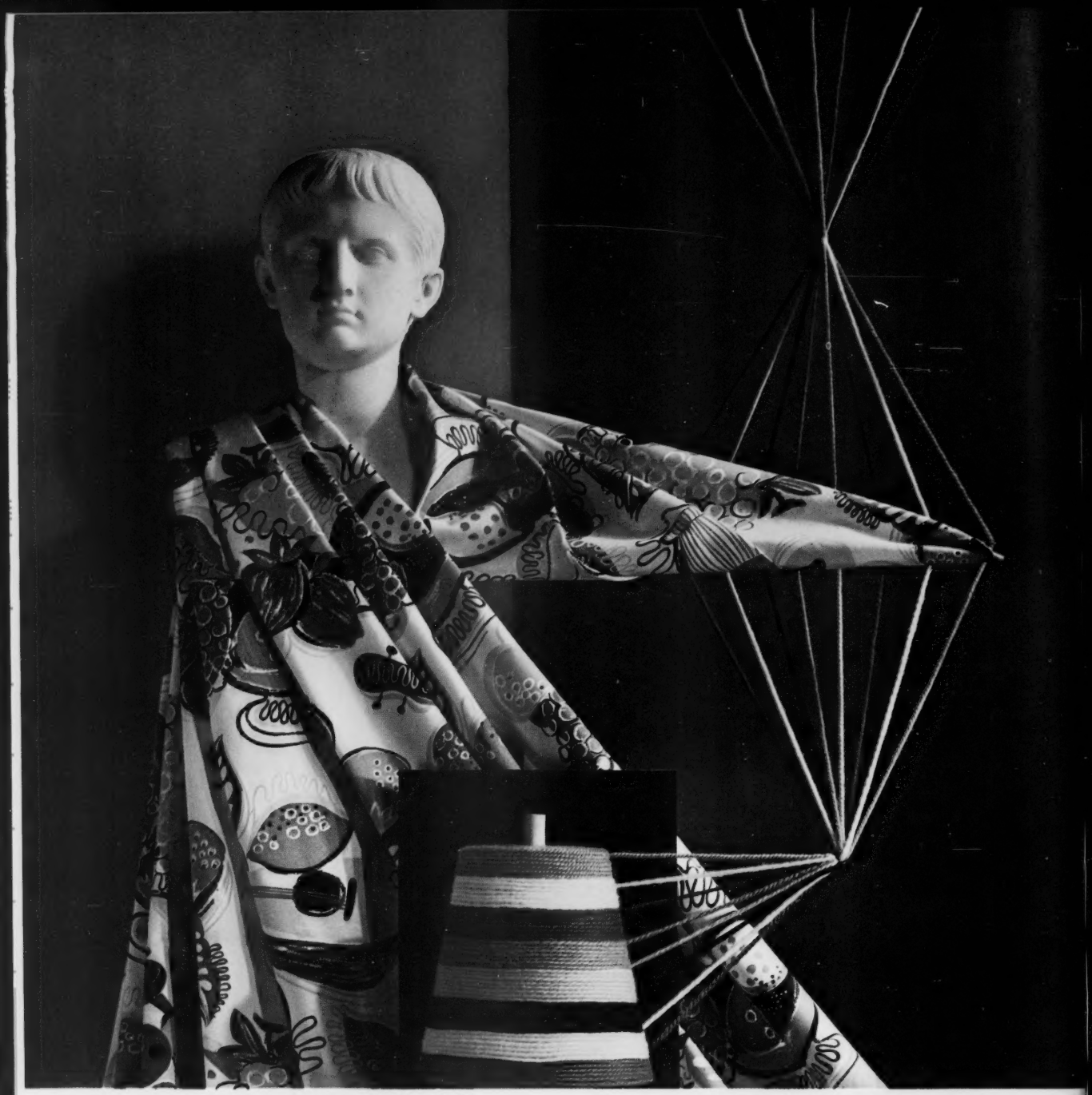
HOWARD PAPER MILLS, INC. • HOWARD PAPER COMPANY DIVISION, URBANA, OHIO

Howard Bond

"The Nation's Business Paper"

Companion Lines: Howard Ledger • Howard Mimeograph Howard Writing • Howard Posting Ledger

Printed on MAXWELL OFFSET—substance 80—Wove finish.



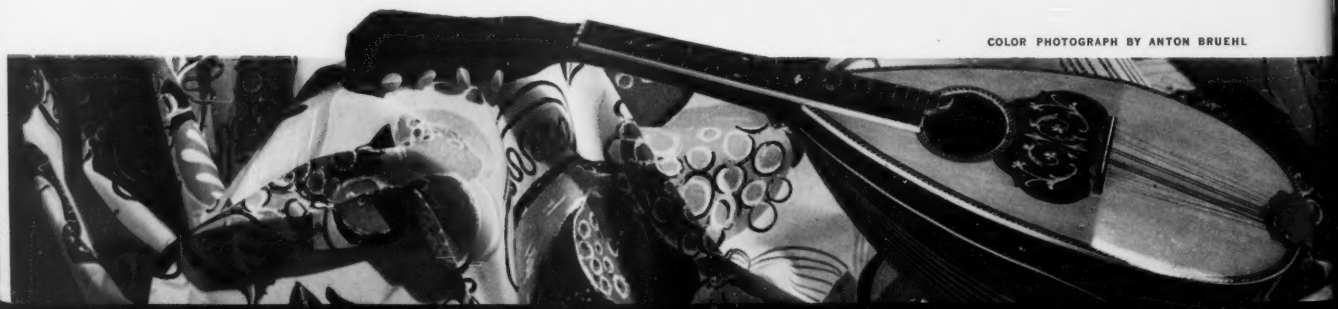
Printed on MAXWELL OFFSET—substance 80—Wove finish.

Doesn't color reproduce better on Maxwell Offset?

Howard Paper Mills, Inc. / MAXWELL PAPER COMPANY DIVISION / **Franklin, Ohio**

We'd be pleased to send you samples of our seven finishes and two tints

COLOR PHOTOGRAPH BY ANTON BRUEHL



Announcing

the all-NEW . . . . . .

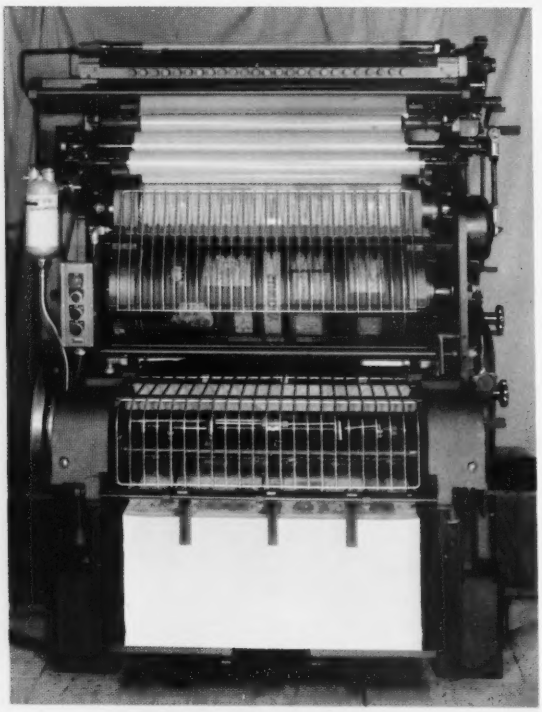
ATF *Super Chief* . . . . . .

. . . the finest, most productive offset press in its class

Here it is . . . the all-NEW

Five big advantages make the ATF Super Chief the finest, most productive press in its size range

MOST PRODUCTIVE PRESS High top speed of 7000 iph, combined with many operating features that insure steady, uninterrupted performance, make the Super Chief the most productive press in 29 in. size range. Among the features that add up to uninterrupted performance are the simple, trouble-free, easy-to-set controls for speed, register, and impression. All can be adjusted while the press is running! Other factors that contribute to high production are the Super Chief's semi-automatic lubrication, the quick-action wash-up attachment, and the easily set feeder that permits fast getaway and reduces lost time in starting or changing jobs.



FINEST QUALITY PRINTER First reason you get top quality production with the Super Chief is its outstanding 19-roller inking system that provides adequate ink break-up and coverage for the heaviest forms. Another quality builder is the highly accurate but easily set register control mechanism. And the stepless speed control—located right on the press—can be adjusted quickly and easily for the exact speed the job demands. Cushioned step-up of speed insures better register control during speed changes.

EASIEST PRESS TO OPERATE Two elements combine to make the Super Chief easier to operate: its compact structure and its easily accessible, easily identified controls. Because of its compactness, one pressman can follow the sheet easily, right through from feeder to delivery. And the readily identified, colored control buttons are centrally grouped to give the pressman quick, convenient control. All controls and adjustments—even attaching the plate and blanket to the cylinder—can be handled by one man.

MOST VERSATILE PRINTER The Super Chief can handle sheets from 10 x 14 to 22½ x 30 in.; weights from onion skin to .030 card. Optional sheet- or stream-feed, sensitive sheet chokes, adjustable head stops and sheet slow-downs make changeover easy, regardless of stock. And with double-wheel pull side guides, the Super Chief maintains critical register over a wide range of stocks.

MOST COMPACT PRESS The Super Chief was carefully designed to provide enough room for all desirable operating features, without taking up unnecessary floor space or becoming clumsy and too large for easy handling. Its 53.2-sq.-ft. floor space requirement makes it the most compact and undoubtedly the easiest press in its size range for one man to handle.

ATF Super CHIEF

Super Chief HIGHLIGHTS

New Integrated Construction . . . saves space, cuts installation time and expense.

Exclusive ATF Built-in Speed Controls save up to $500 in installation costs.

New Cushioned Step-Up saves lost sheets and insures close register through speed changes.

Improved Inking System with special ink-receptive copper-plated steel rollers.

Improved Control Design and Coloring gives easy, quick, safe operation.

Special Pull Side Guides and double register wheels provide close register for any stock.

Improved Sheet Slow-Downs, with individual pressure adjustments, contribute to fine register.

All-New Three-Part Spring Grippers transfer sheet smoothly from register plate to cylinder.

Special-type Plate Clamps — four on each plate bar — permit fast, easy plate attachment.

Prelubricated Bearings — including 78 sealed for life — cut maintenance time and expense.

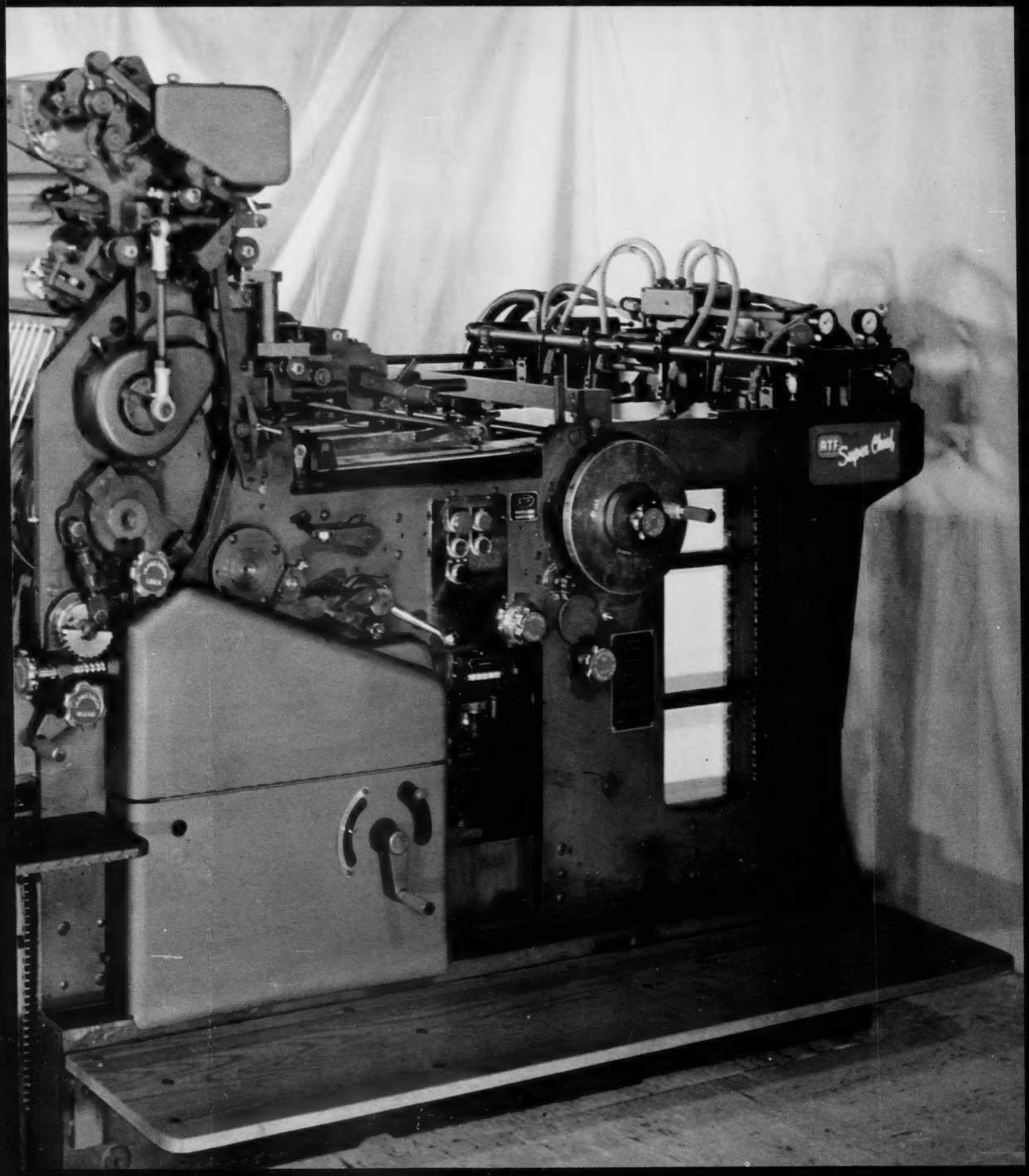
Designed and Manufactured in U. S. A.

The new Super Chief is a press we're proud of at ATF—one you'll be proud of, too, once it goes to work for you in your plant.

It's the result of about five years of intensive development work on the part of ATF engineers, backed by almost a quarter-century's experience in the design and manufacture of offset presses.

It's a completely re-thought, redesigned press, geared to present-day demands for low-cost, high-volume production. Prototype units have been field-tested for over a year in commercial printing plants.

We at ATF think it's the finest, most productive offset press in the 29 size range ever built. You'll see some of the reasons why on these pages.



Before you take a look at the new Super Chief itself, read these press facts

ATF SUPER CHIEF SPECIFICATIONS

PRESS SPEED

Maximum	7000 iph
Minimum	2800 iph
Speed control	Adjust-O-Matic Stepless

SHEET SIZE

Normal sheet	22½ x 29
Maximum sheet	22½ x 30
Minimum sheet	10 x 14
Printing area	22⅛ x 29½
Plate size	27¼ x 30

STOCK HANDLED

Heaviest stock	.030 in.
Lightest stock	9 lb onion skin

PRESS CAPACITY

Feeder capacity	36 in. floor loading
Feeder capacity	30 in. reloading
Delivery capacity	19 in. capacity

INKING SYSTEM

Ink rollers	Total—19
Water rollers	Total— 5

PRESS DIMENSIONS

Width	78½ in.
Length	97½ in.
Height	70½ in.

SEE IT ON DISPLAY

The all-new ATF Super Chief will be on display soon at ATF Equipment Display Centers in:

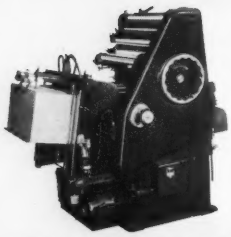
NEW YORK
PHILADELPHIA
ATLANTA
CLEVELAND
CHICAGO
DALLAS
SAN FRANCISCO
LOS ANGELES

WRITE FOR NEW BOOKLET

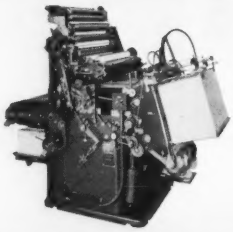
Send coupon for your copy of fact-jammed, colorfully illustrated 16-page brochure on the all-new ATF Super Chief and...

GET THE COMPLETE STORY
FROM YOUR LOCAL ATF REPRESENTATIVE

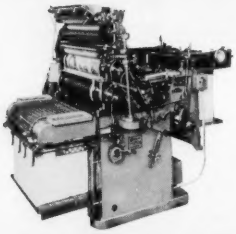
select your next offset press from ATF
...the world's broadest line



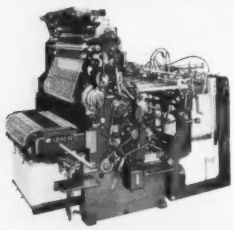
ATF Chief 20 (14 in. x 20 in. sheet)



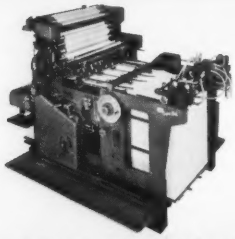
ATF Chief 22 (17½ in. x 22½ in. sheet)



ATF Chief 24 (17¾ in. x 24½ in. sheet)

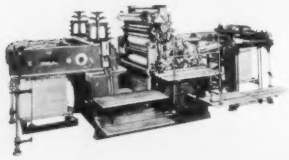


ATF Chief 29 (22½ in. x 29 in. sheet)

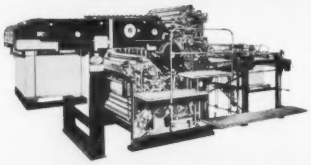


ATF Super Chief (22½ in. x 30 in. sheet)

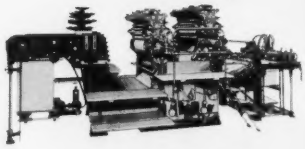
An all new
ATF Mann N135
will be announced
August 1.
Watch for it.



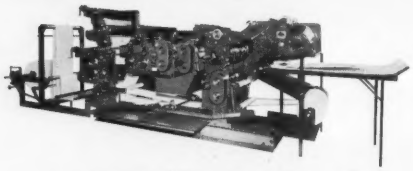
ATF Mann Single Color Presses



ATF Mann Perfector (38 in. x 53½ in.)



ATF Mann Two-Color Presses



ATF Web-Fed Presses (web widths to order)

The complete story on any ATF Chief, Mann or Web-Fed Offset Press is yours for the asking. There's a booklet on each one, showing features and specifications. Send coupon below for copies you want.

American Type Founders, Inc.
(A subsidiary of Daystrom, Inc.)
200 Elmora Avenue
Elizabeth, New Jersey

Dear Sirs:

Please send me copies of the following booklets:

The new 16-page, 4-color brochure on the ATF Super Chief ☐

Chief 20 ☐ Chief 22 ☐ Chief 24 ☐ Chief 29 ☐ One-Color Manns ☐

Mann Perfector ☐ Two-Color Manns ☐ Web-Fed Presses ☐ • • • • • • •

Name_____

Firm _____

Address_____

City_____ Zone_____ State_____

BETTER, MORE PROFITABLE PRINTING FROM THE WIDEST LINE OF PROCESSES

Gravure • Letterpress • Offset

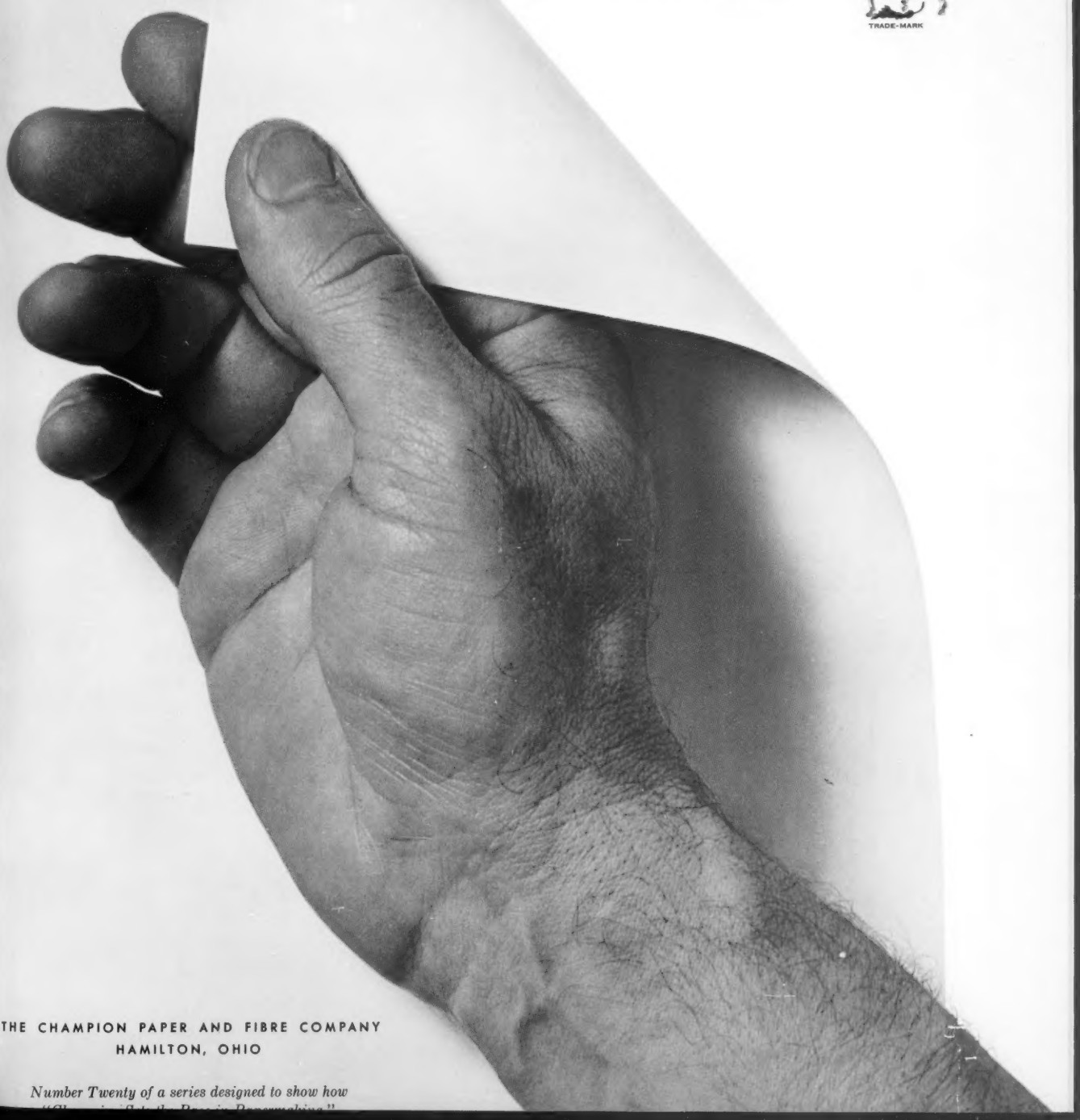
Sheet and web-fed presses... composing room, camera and plate-making, press room and bindery equipment

Printed in U. S. A. on ATF Chief Press
CH 109—120M—4/55

For the finest reproduction...

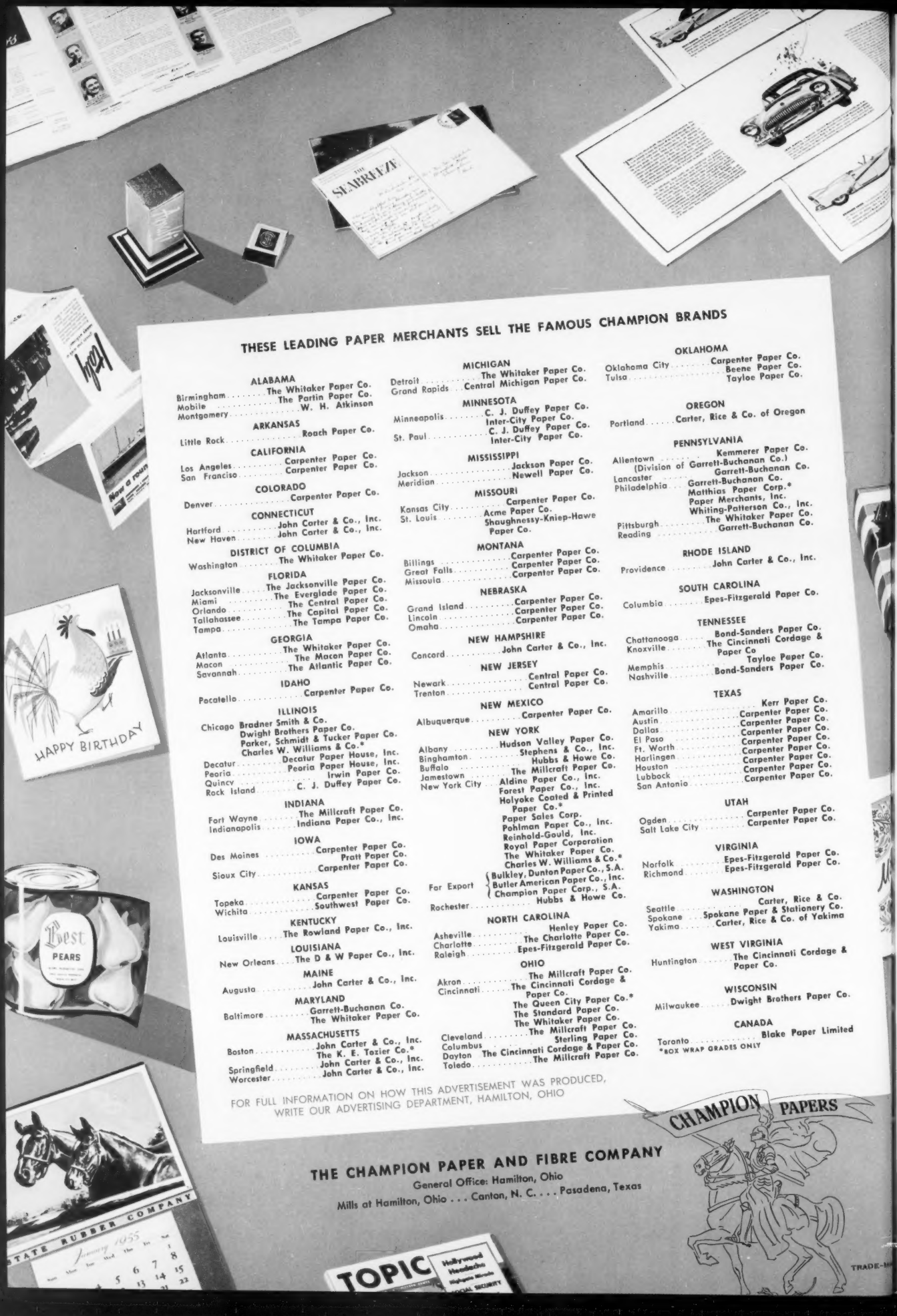
Kromekote®
BRAND
CAST COATED PAPERS

CHAMPION PAPERS
TRADE-MARK



THE CHAMPION PAPER AND FIBRE COMPANY
HAMILTON, OHIO

Number Twenty of a series designed to show how



THESE LEADING PAPER MERCHANTS SELL THE FAMOUS CHAMPION BRANDS

ALABAMA
Birmingham — The Whitaker Paper Co.
Mobile — The Partin Paper Co.
Montgomery — W. H. Atkinson

ARKANSAS
Little Rock — Roach Paper Co.

CALIFORNIA
Los Angeles — Carpenter Paper Co.
San Francisco — Carpenter Paper Co.

COLORADO
Denver — Carpenter Paper Co.

CONNECTICUT
Hartford — John Carter & Co., Inc.
New Haven — John Carter & Co., Inc.

DISTRICT OF COLUMBIA
Washington — The Whitaker Paper Co.

FLORIDA
Jacksonville — The Jacksonville Paper Co.
Miami — The Everglade Paper Co.
Orlando — The Central Paper Co.
Tallahassee — The Capital Paper Co.
Tampa — The Tampa Paper Co.

GEORGIA
Atlanta — The Whitaker Paper Co.
Macon — The Macon Paper Co.
Savannah — The Atlantic Paper Co.

IDAHO
Pocatello — Carpenter Paper Co.

ILLINOIS
Chicago — Bradner Smith & Co.
Dwight Brothers Paper Co.
Parker, Schmidt & Tucker Paper Co.
Charles W. Williams & Co.*
Decatur — Decatur Paper House, Inc.
Peoria — Peoria Paper House, Inc.
Quincy — Irwin Paper Co.
Rock Island — C. J. Duffey Paper Co.

INDIANA
Fort Wayne — The Millcraft Paper Co.
Indianapolis — Indiana Paper Co., Inc.

IOWA
Des Moines — Carpenter Paper Co.
Pratt Paper Co.
Sioux City — Carpenter Paper Co.

KANSAS
Topeka — Carpenter Paper Co.
Wichita — Southwest Paper Co.

KENTUCKY
Louisville — The Rowland Paper Co., Inc.

LOUISIANA
New Orleans — The D & W Paper Co., Inc.

MAINE
Augusta — John Carter & Co., Inc.

MARYLAND
Baltimore — Garrett-Buchanan Co.
The Whitaker Paper Co.

MASSACHUSETTS
Boston — John Carter & Co., Inc.
The K. E. Tozier Co.*
Springfield — John Carter & Co., Inc.
Worcester — John Carter & Co., Inc.

MICHIGAN
Detroit — The Whitaker Paper Co.
Grand Rapids — Central Michigan Paper Co.

MINNESOTA
Minneapolis — C. J. Duffey Paper Co.
Inter-City Paper Co.
St. Paul — C. J. Duffey Paper Co.
Inter-City Paper Co.

MISSISSIPPI
Jackson — Jackson Paper Co.
Meridian — Newell Paper Co.

MISSOURI
Kansas City — Carpenter Paper Co.
St. Louis — Acme Paper Co.
Shaughnessy-Kniep-Hawe Paper Co.

MONTANA
Billings — Carpenter Paper Co.
Great Falls — Carpenter Paper Co.
Missoula — Carpenter Paper Co.

NEBRASKA
Grand Island — Carpenter Paper Co.
Lincoln — Carpenter Paper Co.
Omaha — Carpenter Paper Co.

NEW HAMPSHIRE
Concord — John Carter & Co., Inc.

NEW JERSEY
Newark — Central Paper Co.
Trenton — Central Paper Co.

NEW MEXICO
Albuquerque — Carpenter Paper Co.

NEW YORK
Albany — Hudson Valley Paper Co.
Binghamton — Stephens & Co., Inc.
Buffalo — Hubbs & Howe Co.
Jamestown — The Millcraft Paper Co.
New York City — Aldine Paper Co., Inc.
Forest Paper Co., Inc.
Holyoke Coated & Printed Paper Co.*
Paper Sales Corp.
Pohlman Paper Co., Inc.
Reinhold-Gould, Inc.
Royal Paper Corporation
The Whitaker Paper Co.
Charles W. Williams & Co.*
For Export — Bulkley, Dunton Paper Co., S.A.
For Export — Butler American Paper Co., Inc.
For Export — Champion Paper Corp., S.A.
Rochester — Hubbs & Howe Co.

NORTH CAROLINA
Asheville — Henley Paper Co.
Charlotte — The Charlotte Paper Co.
Raleigh — Epes-Fitzgerald Paper Co.

OHIO
Akron — The Millcraft Paper Co.
Cincinnati — The Cincinnati Cordage & Paper Co.
The Queen City Paper Co.*
The Standard Paper Co.
The Whitaker Paper Co.
Cleveland — The Millcraft Paper Co.
Columbus — Sterling Paper Co.
Dayton — The Cincinnati Cordage & Paper Co.
Toledo — The Millcraft Paper Co.

OKLAHOMA
Oklahoma City — Carpenter Paper Co.
Tulsa — Beene Paper Co.
Taylor Paper Co.

OREGON
Portland — Carter, Rice & Co. of Oregon

PENNSYLVANIA
Allentown — Kemmerer Paper Co.
(Division of Garrett-Buchanan Co.)
Lancaster — Garrett-Buchanan Co.
Philadelphia — Garrett-Buchanan Co.
Matthias Paper Corp.*
Paper Merchants, Inc.
Whiting-Patterson Co., Inc.
Pittsburgh — The Whitaker Paper Co.
Reading — Garrett-Buchanan Co.

RHODE ISLAND
Providence — John Carter & Co., Inc.

SOUTH CAROLINA
Columbia — Epes-Fitzgerald Paper Co.

TENNESSEE
Chattanooga — Bond-Sanders Paper Co.
Knoxville — The Cincinnati Cordage & Paper Co
Taylor Paper Co.
Memphis — Bond-Sanders Paper Co.
Nashville

TEXAS
Amarillo — Kerr Paper Co.
Austin — Carpenter Paper Co.
Dallas — Carpenter Paper Co.
El Paso — Carpenter Paper Co.
Ft. Worth — Carpenter Paper Co.
Harlingen — Carpenter Paper Co.
Houston — Carpenter Paper Co.
Lubbock — Carpenter Paper Co.
San Antonio — Carpenter Paper Co.

UTAH
Ogden — Carpenter Paper Co.
Salt Lake City — Carpenter Paper Co.

VIRGINIA
Norfolk — Epes-Fitzgerald Paper Co.
Richmond — Epes-Fitzgerald Paper Co.

WASHINGTON
Seattle — Carter, Rice & Co.
Spokane — Spokane Paper & Stationery Co.
Yakima — Carter, Rice & Co. of Yakima

WEST VIRGINIA
Huntington — The Cincinnati Cordage & Paper Co.

WISCONSIN
Milwaukee — Dwight Brothers Paper Co.

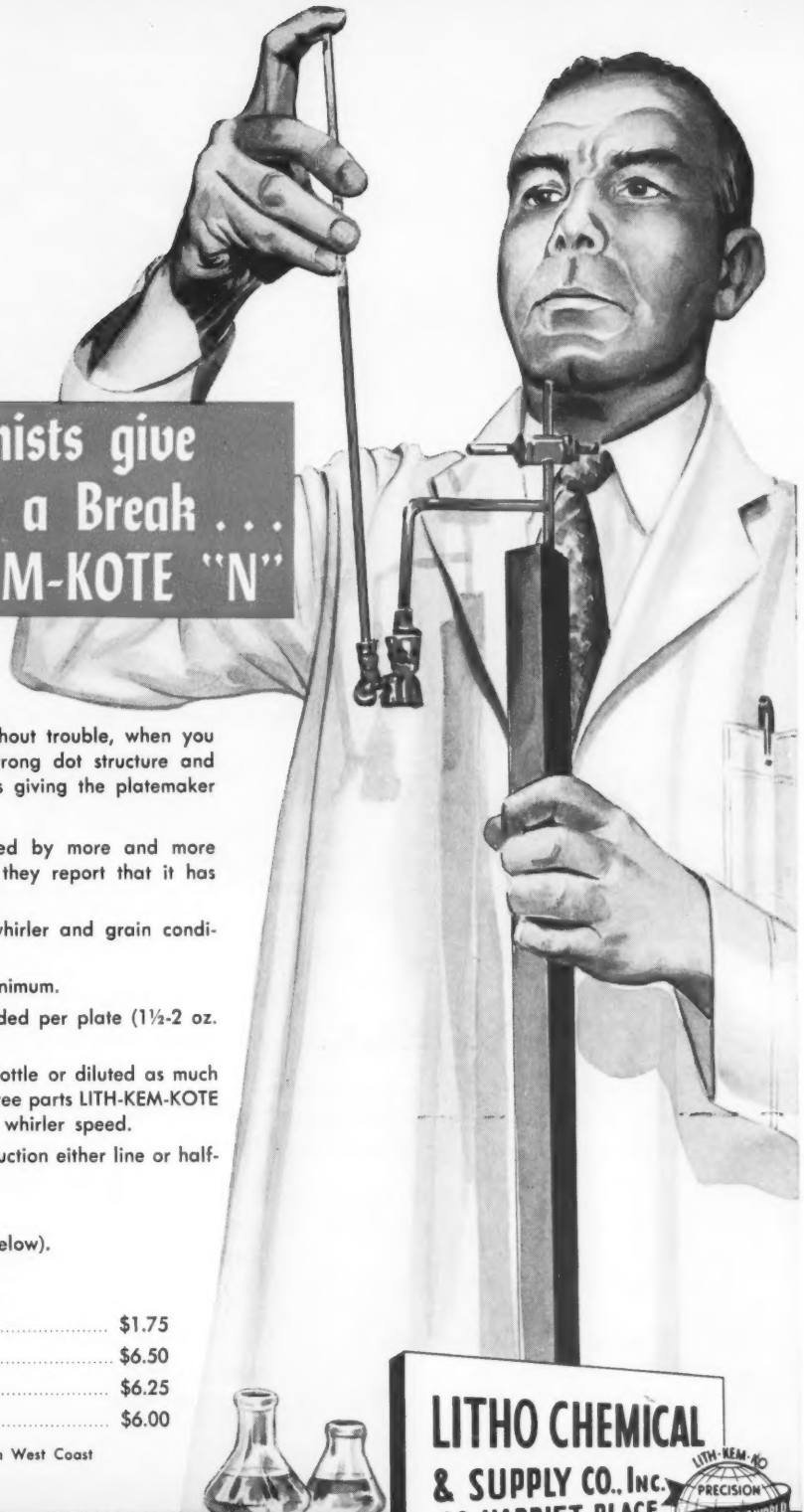
CANADA
Toronto — Blake Paper Limited

*BOX WRAP GRADES ONLY

FOR FULL INFORMATION ON HOW THIS ADVERTISEMENT WAS PRODUCED, WRITE OUR ADVERTISING DEPARTMENT, HAMILTON, OHIO

CHAMPION PAPERS

THE CHAMPION PAPER AND FIBRE COMPANY
General Office: Hamilton, Ohio
Mills at Hamilton, Ohio . . . Canton, N. C. . . . Pasadena, Texas



Our Chemists give Plate Makers a Break . . . with LITH-KEM-KOTE "N"

When you can make a plate without trouble, when you can get long runs, exceptional strong dot structure and use less coating per plate — that's giving the platemaker a break.

LITH-KEM-KOTE "N" is being used by more and more lithographers every day because they report that it has these advantages:

- ★ Smoother coating under all whirler and grain conditions.
- ★ Humidity problems cut to a minimum.
- ★ Less ready to use coating needed per plate (1½-2 oz. for a 17 x 22).
- ★ Can be used right from the bottle or diluted as much as two parts of tap water to three parts LITH-KEM-KOTE "N" depending on grain and whirler speed.
- ★ Long runs of matchless reproduction either line or halftone.
- ★ Long shelf life.
- ★ Added economy (see prices below).

PRICES

1 quart	$1.75
1 gallon	$6.50
4 gallons, per gallon	$6.25
12 gallons, per gallon	$6.00

Prices slightly higher on West Coast

LITHO CHEMICAL & SUPPLY CO., Inc.
46 HARRIET PLACE
LYNBROOK, L.I. NEW YORK

LITH-KEM-KO PRECISION USED AROUND THE WORLD UNIFORMITY

There's a new LITH-KEM-KO Catalog ready for you. Write for a copy.

PRINTS WELL whether halftones or line . . .

one color or many . . .

you and your customers will like

the cleaner, sharper appearance

of jobs printed on cotton

papers by Fox River.

FOX RIVER PAPERS

Appleton, Wisconsin

is the new "U.S." offset blanket

Look for this dotted blue line —it means a "U. S." Blanket

The *long life* and sharpness of *impression* of these blankets are cutting costs for lithographers everywhere. Here are the qualities built into the great "U. S." blanket:

- Low stretch in "around cylinder" direction assures sharp impression, maintenance of register.
- High strength withstands pressure and tension.
- High resilience gives fast "comeback" after each impression.
- Outstanding resistance to smashing.
- Resistance to ink and wash-up materials prevents embossing or ply separation.
- Correct hardness—for good printing quality.
- Uniform thickness minimizes "patching" or underpacking and make-up time.

You can get quick delivery and careful service from any of United States Rubber Company's selected distributors. Each is strategically located. For the address of the one nearest you, write address below.

US RUBBER

"U. S." Research perfects it..."U. S." Production builds it...U. S. Industry depends on it.

UNITED STATES RUBBER COMPANY

MECHANICAL GOODS DIVISION · ROCKEFELLER CENTER, NEW YORK 20, N. Y.

Hose • Belting • Expansion Joints • Rubber-to-metal Products • Oil Field Specialties • Plastic Pipe and Fittings • Grinding Wheels • Packings • Tapes Molded and Extruded Rubber and Plastic Products • Protective Linings and Coatings • Conductive Rubber • Adhesives • Roll Coverings • Mats and Matting

Performance is What Earns These STARS' Reputations!

Diamond-White
Fitchburg Vellum
Fitch-Brite
Hillcourt Opaque Offset
Economy Offset
Hillcourt Greeting
Hillcourt Papeteries
Fitchburg Parchment

Each of the papers in the Fitchburg line at the left is a star performer in its particular field. Each has quality and price balanced to offer unusual value. Nearly a century of experience in fine paper-making is engineered into these papers—to lift them above the ordinary—to keep them in pace with constant improvements in lithography and letterpress printing.

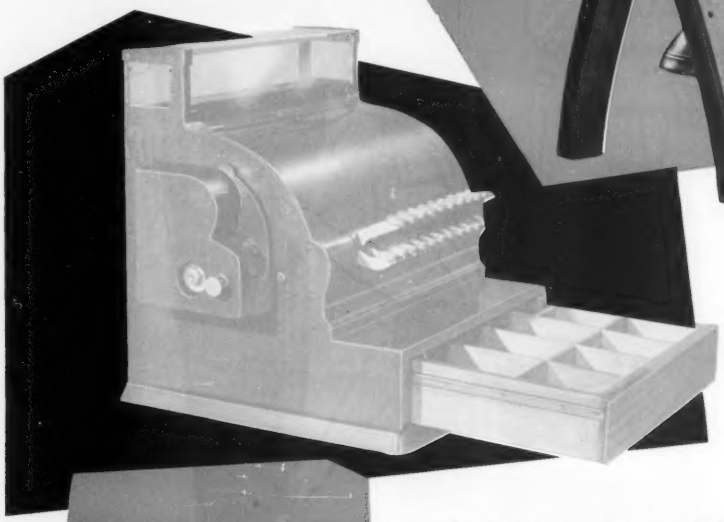
Write for complete information, sample sheets, and reference to local distributors

Established in 1861

Fitchburg Paper Company

MILLS AND GENERAL OFFICES: FITCHBURG 6, MASS.
NEW YORK OFFICE: 250 PARK AVE., N.Y. 17

For printing results that ring the bell



use BBD Excellolith offset ink

It's a lot easier to turn out work that rings the bell with customers when you use a really *modern* ink like BBD's EXCELLOLITH.

EXCELLOLITH is the ink with special "built-in" qualities that give you top performance on regular offset, coated and other stocks... on simple black-and-white or fussy multicolor work. Because it dries to a dense hard finish with a minimum of dryback, EXCELLOLITH lends extra snap and sparkle to your jobs. In fact, it looks just as rich and color-strong when dry as it does when wet. And, when you use EXCELLOLITH, you get clean, sharp printing of type, halftone dots and solids – even small reverses in heavy solids stay open.

Another feature of EXCELLOLITH is that it sets fast on the sheet but not on the rollers. When you use this ink on coated stock you can back up two-sided jobs almost immediately – yet you can shut down the press for an hour or two without having to wash up.

Furthermore, because EXCELLOLITH has extremely high resistance to water and transfers very freely, it permits you to carry less ink on the rollers. And, while EXCELLOLITH is firm-bodied, it is soft enough to pour from the can and easy to handle when mixing color matches in the shop. You can use it just as it comes from our plant, too – EXCELLOLITH requires neither dope or reducer to give you the results you want.

We're confident that EXCELLOLITH will ring the bell with you just as it does for other quality-minded printers and their customers in seven states. Why not give it a trial this week.

Call for a BBD-man and find out how BBD EXCELLOLITH can help you do a better job.

Bensing Bros. and Deeney

Better Inks for Better Printing

3301 Hunting Park Avenue, Philadelphia 29

BAldwin 3-8220

WE TAILOR . . .

to YOUR NEEDS

The services of the N.A.P.L. are cut to your pattern. If you operate a small single color press or a battery of multi-colors, the N.A.P.L. has a service to help you solve your problems.

Here are the services that can be adapted to your needs.

Budgeted hourly rates. To get top efficiency in figuring your costs, you need the kind of cost information supplied by N.A.P.L.

Cost Control System. You will enhance your opportunity to get profitable work if you really know your costs.

Labor Relations. What affects other litho plants regarding hours and wages will no doubt affect you, too. N.A.P.L. keeps you constantly informed on all phases of labor relations.

Trade Customs. When you are fully aware of your rights and those of your customers you can maintain better relations and avoid costly misunderstandings.

Find out how you can profit by membership in the N.A.P.L. Use coupon below.

NATIONAL ASSOCIATION OF PHOTO-LITHOGRAPHERS
317 West 45th Street, New York 36, N. Y.

..... 1955

We hereby make application for enrollment as an Active (Associate) Member in the National Association of Photo-Lithographers, and if elected, agree to abide by its by-laws and support its objects and interests as far as our time and ability will permit.

We enclose herewith $..... as our first year's dues.

ANNUAL DUES FOR THE PRESS EQUIPMENT IN OUR PLANT IS AS FOLLOWS:

No. of Presses	ACTIVE MEMBERS (Those who operate equipment)		
	Presses smaller than 17"x22" (Minimum Dues $37.50 per year).....$20.00 per press per year	$	
	Presses 17"x22" to 22"x28".....$28.00 per press per year	$	
	Presses larger than 22"x28" up to and including 35"x45".....$37.00 per press per year	$	
	Presses larger than 35"x45".....$47.00 per press per year	$	
	MINIMUM DUES, $37.00 per year. Maximum Dues, $450.00 per year.		
	ASSOCIATE MEMBERS Equipment and Supply Dealers and Manufacturers, $125.00 per year.	$	
	Total Annual Dues	$	

Firm .....

Address .....

No., Street or Avenue — City, Zone and State

Signed ..... Phone .....

NATIONAL ASSOCIATION OF PHOTO-LITHOGRAPHERS

..... STREET — NEW YORK 36, N.Y.

IN THE GOOD OLD Summer Time!

YOU GET THE SAME HIGH QUALITY REPRODUCTION ALL THROUGH THE YEAR WITH ALUM-O-LITH PRE-SENSITIZED PLATES!

Don't get the "thermometer blues" just because the mercury's heading for 90 degrees plus. Just keep right on running with Alum-O-Lith "double duty" plates and turn those hot spells into profitable days of production efficiency. For these are the plates that guarantee long runs whatever the degree of temperature or humidity. And you'll find them easier to process, cleaner running and easier to handle than any other pre-sensitized plate on the market.

Seeing is believing! For a demonstration in your shop, call your Alum-O-Lith dealer or write to one of the addresses listed below!

ALUM-O-LITH

the double duty plate ®

Home office and Factory: 278 Arden Drive, El Monte, California.

Warehouses:

Alum-O-Lith, Inc.
Bldg. 23 - Interlake Industries
Joliet, Illinois

Alum-O-Lith, Inc.
3022 Oak Grove Rd., N.E.
Atlanta, Georgia

Alum-O-Lith, Inc.
513-517 E. 32nd St.
Patterson, New Jersey

NO "SHOW-THROUGH"

when you use...

If you have a printing job requiring an unusually high opacity paper, don't settle for less than the best! NEKOOSA OPAQUE holds "show-through" down to a minimum. It performs equally well on letterpress or offset . . . lies flat, never curls, goes through modern high-speed presses fast and smoothly. Ask your Nekoosa paper merchant for the new sample book pictured above. It shows the two finishes and three weights in which NEKOOSA OPAQUE is available.

in Nekoosa's new EASY-OPEN CARTON

Like all Nekoosa and Ardor papers, Nekoosa Opaque comes to you in the revolutionary new carton with the pull-string opener! Red arrow points to tab that opens carton in a jiffy... to save you time and trouble!

Nekoosa OPAQUE

NEKOOSA BOND • NEKOOSA LEDGER • NEKOOSA MIMEO • NEKOOSA DUPLICATOR
NEKOOSA MANIFOLD • NEKOOSA OFFSET • NEKOOSA MASTER-LUCENT • NEKOOSA SUPER-LUCENT

NEKOOSA-EDWARDS PAPER COMPANY, PORT EDWARDS, WISCONSIN

GUEST

Editorial

By Carl R. Schmidt
President, Lithographers National Association

SINCE the Lithographers National Association is celebrating this year its 50th Golden Anniversary Convention, we have appropriately chosen as our Convention theme "Lithography's March of Progress."

As an incorporated association we are this year rounding out 50 years of continuous service to our members and to the lithographic industry. This, truly, has been a half century of notable progress and achievement for lithography as a modern printing process.

It was just 50 years ago that the offset principle — long used in the metal decorating branch of the industry — was first applied in the paper field. Soon after, the photocomposing machine, which was to have a marked effect on the progress of our industry, made its debut.

The lithographic process prior to World War I had been largely a *specialty* printing process, but early in the period of the roaring '20s it became established as a rapidly growing *commercial* printing process with great progress achieved in its techniques and methods of reproduction. The automatic and stream feeder on presses, the dot etch method of color correction, the deep etch method of platemaking, and countless other new and important innovations came gradually into general commercial use.

About midway in this 50-year period the Lithographers National Association took the major lead for the industry at large in organizing and financing the Lithographic Technical Foundation, an organization dedicated to basic research and education. Because of its splendid accomplishments over the years, the whole industry has vastly benefited. However, space does not permit listing even the most important of the many developments of the past decade which have contributed so much to the improved quality and the elimination of materials and labor waste.

WITH this proud history of technological advance, improved quality, and increased efficiency in production, the lithographic industry, from lowly beginnings, has emerged as almost a billion dollar industry. We have enjoyed an ever-increasing market for the product of our presses as the economy and versatility of the lithographic process have become better understood in our diverse customer fields.

Against this background of industrial growth and achievement one might reasonably expect to find our industry enjoying an unparalleled era of prosperity. That this is not so poses for individual company managements some very serious questions.

As mid-year 1955 approaches, it becomes apparent that the current year, barring a serious turn in world affairs, will set a new all-time record for the total production of goods and services in the United States. This production will not be achieved in closed markets but, rather, against the toughest kind

(*Continued on Page* 151)

PROGRAM

Monday, June 20

MORNING SESSION:

"Address of Welcome"
Carl R. Schmidt, LNA President

"Survey Report on Lithographic Profits for 1954"
W. Floyd Maxwell, Executive Director

"Expanding the Lithographic Market"
Vernon K. Evans, Chairman, Lithographic Promotion Committee

"Weaknesses in the Personal Selling Approach"
N. M. Perris
N. M. Perris, Stevenson, Jordan & Harrison, N. Y. C.

BANK STATIONERS' SECTION

Bank Stationers' Section Luncheon and Afternoon Meeting
Section Chairman: Fred J. Kraemer, Jr.

"The Past, Present and Future of Bank Mergers"
Ed Tyng, Banking Editor, N. Y. Journal of Commerce

Report of The Imprinting Machine Development Committee
Cecil Rudnick, Chairman

General Discussion Session

Tuesday, June 21

MORNING SESSION:

"Bradshaw's Billions"
New color film promoting color printing, Courtesy of Eastman Kodak Co.

"Quality Speaks"
J. Louis Landenberger, President, Lithographic Technical Foundation

LNA Industry Relations Committee Session
Presiding—James G. Strobridge, Chairman

"Let Research and Education Improve Your Quality"
Michael H. Bruno, LTF Research Director, Chicago, Ill.
Charles Shapiro, LTF Educational Mgr., New York, N. Y.

"The Plus Factor in Work Simplification"
George W. McSweeney, President
Deluxe Check Printers, Inc., Chicago, Illinois

AFTERNOON SESSIONS:

—Two concurrent meetings

LNA Cost, Accounting and Financial Management Committee Session
Presiding—Everett F. Bowden, Chairman

"Profit Improvement"

LNA Labor Relations Committee Session
Presiding—Paul H. Lyle, Chairman

"Lithographic Employer-Employee Programming"

Wednesday, June 22

MORNING SESSION:

"Lithographic Industrial Relations"
Quentin O. Young, LNA Director of Labor Relations

"Communications—The Labor-Management Catalyst"
Robert Roper, Vice President & Director of Industrial Relations, Philip Morris, Inc.
Dwight J. Thompson, Vice President & Director of Industrial & Public Relations—Champion Paper & Fibre Company.

Concluding Inspirational Speaker to be announced

LNA

IN 1888 a small trade organization was formed to serve a primitive industry. The industry, lithography, has grown in the succeeding years to become an important segment of the graphic arts field, and the trade group, the Lithographers National Association, has paralleled this growth by virtue of increased membership and 49 conventions.

This month LNA will mark its 67th year with its 50th convention, devoted to the theme, "Lithography's March of Progress." The Lake Placid Club, Essex County, N. Y., will be the scene of the meetings, June 20-22.

Program Additions

Additions to the LNA program, as reported in MODERN LITHOGRAPHY last month (page 87) include several speakers and panel discussions. An additional feature will be a demonstration of a new imprinting press, developed on a cooperative basis by members of the Bank Stationer's Section. The press has a speed of 10,000 individual check impressions an hour.

The complete program is listed in the adjoining column. Following are the recent additions to the program:

Vernon K. Evans, chairman of the promotion committee, will follow the president's address with a report on "Expanding the Lithographic Market," reviewing LNA's industry-wide promotion of lithography in connection with its annual Lithographic Awards Competition and Exhibit.

'Personal Selling'

The concluding speaker on the Monday morning program will be N. M. Perris, Stevenson, Jordan and Harrison, New York, who will discuss "Weaknesses in the Personal

♦ **50 Years**

Completes Convention Plans

Selling Approach." At the Monday afternoon luncheon meeting of the Bank Stationers' Section Ed Tyng, banking editor of the *Journal of Commerce*, will discuss "The Past, Present and Future of Bank Mergers." A general discussion session, dealing with problems currently important to bank stationers, will be highlighted by the final report of the Imprinting Machine Development committee under chairman Cecil N. Rudnick, Joseph Berg Mfg. Stationer, Inc.

A new color film promoting color printing in the graphic arts, entitled "Bradshaw's Billions" (see review, May ML, page 83), presented under the auspices of Eastman Kodak Co., will open the convention Tuesday morning. It replaces the film previously scheduled. It will be followed by a brief address on "Quality Speaks" by J. Louis Landenberger, president, Lithographic Technical Foundation.

George W. McSweeney, president of De Luxe Check Printers, Inc., will discuss "The Plus Factor in Work Simplification" on Tuesday morning.

Closed Workshop

A closed workshop session, "Lithographic Employer-Employee Programming," considering the community, customer, single-plant and multi-plant aspects of the problem, will run concurrently with the cost session.

A discussion of "Communications — The Labor-Management Catalyst," with Robert Roper, vice-president and director of industrial relations, Philip Morris, Inc. and Dwight J. Thomson, vice-president and director of industrial and public relations, Champion Paper & Fibre Co., taking part, is listed for Wednesday morning.★

W. Floyd Maxwell

J. L. Landenberger

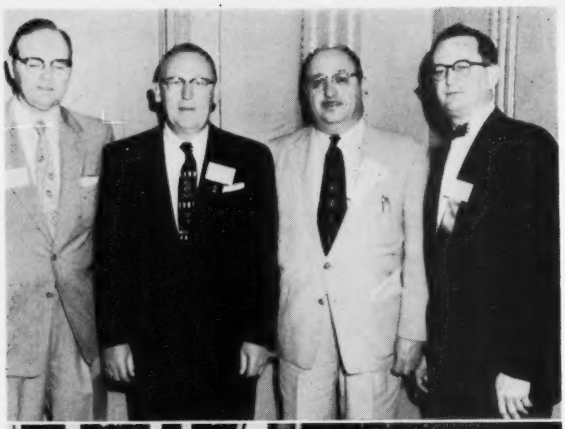
E. F. Bowden

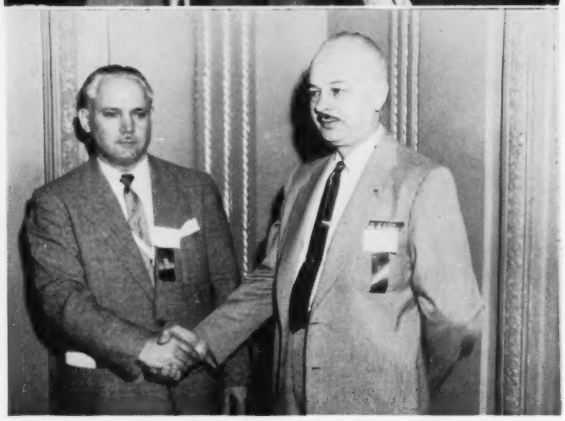
J. G. Strobridge

Robert Roper

N. M. Perris

of Progress ♦





NALC Plans Future Growth

WITH 10 years of experience behind them, it was natural for members of the National Association of Litho Clubs at their annual convention to look back over their accomplishments since the group was planned in Philadelphia in 1945.

NALC, meeting in Milwaukee's Hotel Schroeder, had a chance to review its progress through the years in a comprehensive report submitted by Fred A. Fowler, of Washington, NALC historian. The report cited the growth of the association from 10 clubs with 1000 members in 1946 to 22 clubs with 3500 members today. and summarized some of the activities of the organization.

The NALC also made plans to reward past presidents of the association with gold busts of Alois Senefelder.

Accent on Future

But the group did not linger long over past accomplishments. Rather the accent was on the future of the organization and the work that still must be done before it can reach maturity. This theme was evident in

New NALC officers: (l.-r.) Elton Baker, Chicago, executive secretary; J. Leonard Starkey, Philadelphia, treasurer; Sol D'Alessandro, Cleveland, 2nd vice president; and R. Walter Blattenberger, St. Louis, 1st vice president.

Sol D'Alessandro (l.), and Andrew Balika, both of Cleveland, talk with Mike Duplinski, Dayton; and Howard Beseke, president of the host Milwaukee Litho Club in Schroeder meeting room.

Paul Meunier (l.), Cleveland; Fred Hoelperl, Buffalo; Dennis O'Conner, Lanston Monotype; and Harold Johnson, Cleveland.

New president W. O. 'Toby' Morgan (l.) Chicago, is welcomed by outgoing president Jack Blades, Washington, after the election.

the statement by historian Fowler that "the record of the past gives a good basis for predicting that eventually NALC will contain 48 member clubs." Outgoing president Jack Blades, of Washington, D. C., also placed emphasis on the future in his report.

In addition, the theme was present in the report of Andrew Balika, Cleveland, field organizer for the association, who called for NALC to "advertise the benefits of the organization through national publications."

"We wonder why we don't get good apprentices," Mr. Balika declared, "but we never take time to publicize lithography, the fastest growing portion of the graphic arts."

8 Prospects

He told the members that he had been working with eight prospective litho clubs during the year but that, at convention time, he had received no definite new commitments for membership in NALC. He listed Los Angeles and Indianapolis as the best prospects.

Bust of Alois Senefelder, which NALC and local clubs will give past presidents.

According to many litho club members at the two-day session, the friendly Milwaukee reception and the well-planned program combined to make the convention one of the most successful to date. Heading the program was a talk by Charles A. Conrard on work simplification. Mr. Conrard, personnel director at Western Printing and Lithographing Co., Racine, Wis., enumerated three ways of getting results in any plant: Tell 'em, sell 'em and consult 'em.

He said the third is preferable, whenever practicable, because acceptance of a work simplification procedure is more important than development of the idea itself.

"Work simplification means worker participation with know-how," he explained, illustrating his points with a film showing the principles of the program.

Mr. Conrard said that "with the rapid growth of lithography we have gotten ahead of our ability to train men in the industry." This fact, he went on, focuses attention on the importance of getting things done in the most efficient manner — of instituting a work simplification program.

W. O. Morgan, offset editor of *Graphic Arts Monthly*, and a member of the Chicago club, was elected president of NALC for the coming

Kenneth E. Butler (l.) Sam'l Bingham's Son Mfg. Co. and Bill Stevens, Miehle.

Prof. Russell Oakes shows how to light a cigarette when you can't find a match. He entertained at Saturday luncheon.

Philadelphia greets Canada: J. Leonard Starkey (l.), Harvey Webb and Mrs. Starkey, Phila.; Saul Markowitz, Quebec; Stephen Rubenstein, Phila.; and Frank M. Rolph, Ontario; at cocktail party.

James M. Ludford, (l.), Willis Perry and Rae Goss, all from Chicago club.

Harry Jones, (l.), Chicago, greets William Clawson, Miller Printing Mach. Co.

Members of the Milwaukee club committee.

year. Other officers, also elected unanimously, are R. Walter Blattenberger, St. Louis, first vice president; and Sol J. D'Alessandro, New York, second vice president. In the only contested position, J. Leonard Starkey, Philadelphia, won out from Frank H. Mortimer, Washington, for the position of treasurer. Mr. Mortimer was outgoing executive secretary of the organization. President Morgan appointed Elton Baker, Chicago, to fill the position.

Assistants Named

J. Donald Rovegno, New York, and John W. Murphy, Detroit, were appointed assistant secretaries, while Rae H. Goss, Chicago, was named historian. Mr. Morgan asked Mr. Balika to continue as field organizer.

In other reports to the convention, outgoing treasurer D'Alessandro stated that cash on hand totaled $1523.96 and outgoing executive secretary Mortimer reported that all but three of the member litho clubs now conduct their business on a calendar year basis and elect officers in January.

Social high spot of the convention was the annual banquet Saturday evening. A six act program of entertainment was provided, along with an orchestra for dancing before and after the dinner. Prof. Russell Oakes, "The Wizard of Waukesha," amused the group at the Saturday luncheon with samples of his Rube Goldberg type inventions. On a more serious note was the inspirational talk by Hal Goodnough, sales promotion manager for the Milwaukee Braves, who described some harrowing experiences of ball players, on and off the field.

Next Year:

The 11th annual NALC convention next year is scheduled for the Lord Baltimore Hotel, Baltimore, Md., April 19-21. Thomas Bowden, of the Baltimore club, is convention chairman.

Harnish Fund

Before adjourning, NALC voted to contribute $25 to a fund being raised for the family of former NALC president Ed Harnish, of Boston. Mr. Harnish died in 1953, and his wife shortly thereafter, leaving several small children. Herbert L. Borden, Boston, reported on the fund drive. The association also voted to send a gold Senefelder bust to the children as a memento of their father's work in the litho club movement.

Club members will convene in Baltimore next year for the annual convention. Twin Cities club will be host at the winter meeting of the NALC Council. The Chicago Club's request for the 1957 convention also was granted.★

For sidelights on the Milwaukee convention, turn to Thru the Glass, *page* 115.

Mr. and Mrs. Fred A. Fowler, Washington.

Officers, old and new: Walter Blattenberger, 1st VP (l.), Rae Goss, new historian; Fred Fowler, outgoing historian; and Frank Mortimer, outgoing exec.-secy.

James M. Ludford, W. S. Grau and J. J. Spevacek, all of Chicago Litho club.

Front: Jack Loos, Cincinnati (l.) Judge William Recht, Wm. Recht Co.; Dewey Kallison, Chicago. **Rear:** William Kling, Cincinnati; John Mackey, Twin Cities; and Clifford Hebbler, Cincinnati.

The man with the fierce look is Donald Rovegno, New York. The women (l.-r.): Mrs. Robert Love, Detroit; Mrs. Rovegno; Mrs. John Murphy and Mrs. Fred Siggins, Detroit; and Mrs. Elton Baker, Chicago.

James Bubar (l.), Chester Sasinowski and Fred Hoelperl, all of Buffalo club.

How to expand, what to buy

When You Outgrow Your Presses

By Lawrence A. Littman

Lord Baltimore Press

I THINK the thing that appeals to most of us in this business of lithography is the progress that has taken place in the last three decades and the evolution of our equipment and plants as we grew in strength and stature.

We are today employing more men and women in our industry than in any previous peace-time period.

I have in mind my old company in New York in the early 'twenties. It was a small company, with 50 to 60 employes, including sales and factory. The presses and related equipment were small. Its work in those days was mostly black and white. In fact, in the early 'teens it had been devoted to plate making for the trade. But the lithographic process began to develop and its ease of reproduction caught the fancy of many of the large companies that wanted quick service at a fair price, so the work flowed in in ever increasing quantities. With the advent of longer runs and the development of the deep-etch method, the company grew.

Trend To Color

Color began to become more prominent. First two-color, then four-color work. I mean the actual production of color work on two-color presses — not just reproduction of masterpieces and the like, but advertising matter in its many forms. The runs became longer and as they did the press sizes became larger. First we purchased presses 35″ x 45″, then 38″ x 50″ and 41″ x 54″. By this time our plant facilities were bursting at the seams. So, we were forced to

Lawrence A. Littman

move. I always felt that that move was a mistake. The company obtained a 20-year lease in new quarters. With a growing business, such as ours, records showed it would have been far wiser to have bought our own plant and to have relocated the personnel at a time when it was not too large.

Now, to get down to the basic considerations I feel that any one of us should use when we find ourselves outgrowing our present presses and our plant. I would like to point out that I have been through several of these moves and, naturally, by this time feel that I can really give you some pretty good ideas as to what it means and takes to go through with such an undertaking.

Careful Study

First, I would recommend that the decision to expand by moving to a new location be undertaken with careful and prepared study. Your business must be analyzed carefully. This study must be based upon your past performance and predicated on your anticipated growth in at least the next 10 years. Thus, you will have the figures to substantiate your moves and to calculate the size of plant you should plan to build or buy.

From this study you should be able also to visualize the size of your runs and the economical sheet size, and thus arrive at what equipment you are going to need to meet your expansion. Now such a study may not mean that you will have to move. Some of you may be fortunate in having the room and it is a question of picking the size of press, or presses, that will fit your needs. If you do have the plant area, you are indeed fortunate. In any case, the study should be made because it is the logical step to arrive at the right decision.

Now, let us assume that you have made your study and that you find your sales curve shows that you can expect to grow X% each year for the next 10 years. Of course, I am assuming that your pocketbook will allow for this expansion program.

Now, to get down to the business of planning your plant. Most people think of buying a plant and then fitting the equipment to the plant. That, to my way of thinking, is just plain backwards. *The building is to be fitted to the layout.* Of course, it takes a lot of planning to make the plant layout and this study goes back to the analysis you made when you were contemplating an expansion.

Let me say that the use of models

is an excellent way to make these studies. Several companies make models which offer a very good visual study when planning your departments. Two-dimensional models can be used, but the three-dimensional models, or just plain blocks are preferred. They must be made to exact scale. The use of flat models or drawings of proposed layouts certainly is all right, but seldom are all your foremen and superintendents engineers and it is not always possible for them to analyze and see all the factors that go into an efficient layout. Models are much more desirable. They can be moved around on the plans and make the studies much easier.

Start Figuring

Having your present plant in operation certainly is an aid in your plans. Everyone has his own ideas of what he wants, and the studies show what you need. You have now made your models and each departmental foreman has been called in to give his own ideas of what he likes and what he thinks will make a good, efficient layout. You are now ready to start figuring area required for each department and to fit these figures into a composite picture. The results should show a total that compares with your predicated total area, plus your allowance for a ten-year expansion.

It has been my experience that a quick guide to use in planning the average litho plant with sheet-fed presses is as follows: your pressroom should approximate 25 percent of the plant; your service departments (camera, art, graining, plate making, stripping, etc.) another 25 percent; paper stores, supplies, maintenance, receiving and shipping, office and other facilities and finishing the remaining 50 percent. These figures will vary for each plant but they will give you a quick check on your alloted space until you have arrived at exact figures from your final layouts.

Now, in all of my statements, I have had to assume that you have reached the state of bulging walls. You must expand to operate efficiently. You cannot operate efficiently in your present plant and you must relocate. Must you build, buy or lease? The pocketbook, as I have said, determines the step to take. I hope you can build. It seems to be the right thing to do and the one-story plant with no elevators to slow you down is the right move. They are the "ranch homes" of this modern era. You know you do spend most of the hours of your active life in your plant.

These suggestions on expansion were given to members of the Washington Litho Club at the April meeting. Mr. Littman, president of the Baltimore club and past president of the New York Litho Club, is a past master at plant expansion, having been connected with such moves twice during his 25 years in the graphic arts industry. He is assistant general superintendent at Lord Baltimore Press, Baltimore, Md., and is active in LTF and TAGA in addition to his many litho club activities.

Location

A location must be considered seriously. Many things determine this. Highways, employes' access to plant, parking facilities, communications, railroad, acreage available for the plant and for future expansion. There are probably other factors that determine the location but that idea of trying to put a modern lithographic plant in the middle of a busy city is gone.

Now you have gotten your layout and plant location and built your plant. While this was in the making, you have also decided from the studies you made that your expansion not only indicated a new plant but also meant certain equipment would have to be added to your manufacturing facilities to help you pay for this expansion.

You have been operating some of the smaller size presses. Your studies show conclusively that you are ready to step into the big league. You are in a quandary as to what type of equipment to buy. Now I'm just going to say right here that this is going to be an impartial resume of what you can buy. Everyone to his own likes; also you know your own qualifications better than I do. So, here goes.

There are several manufacturers of large sheet-fed presses in this country. I am going to give you a review of each one, pointing out to you some of the best features of each. Then, my advice to you will be to do a little visiting and talk to some of your good friends in this business. You know we don't have many secrets in the business and most of those men will be glad to give you a look-see providing you have been one of those friendly competitors who hasn't tried to cut your prices to take some of his valuable customers.

Large Offset Presses

I should like to give you this review in the order of the quantity of presses in operation. There are four large lithographic presses now being offered for sale in this country. There may be others but these represent the most prominent. When I say large presses, I am talking about any sheet-fed press 42″ x 59″ or larger.

1. The Hoe Press

R. Hoe & Co., of New York City, manufactures only one size press, 50″ x 72″ maximum, in multiples from one to six colors.

Although not too well known among the sheet-fed press users in this country, this press offers some unusual features that I will try to point out to you.

The most prominent is its method of handling the sheet through the press on a continuous chain with the paper held on traveling gripper bars. These sheets are fed to a feed-in cylinder for pre-timing and register by means of a Christensen automatic pile feeder. Once the sheet has been gripped by its gripper bar finger, it is transported throughout the press in a line almost parallel to the floor.

A method of ejecting sheets auto-

matically as they reach the in-feed and registering cylinder, should they be misregistered, short, dogeared or have torn corners, has been worked out. The empty gripper bar automatically trips each printing unit to prevent a double roll-up of ink and water on the plate. The next gripper bar, if containing a sheet, will print because the traveling gripper bar signals each printing unit before entering the impression cylinder gap.

Another feature is a pre-registering table with clamping bars which allows a pre-makeready. In addition, the plate cylinder may be adjusted radially and horizontally by motor push button control. There are adjustments for bowing the front stops to allow for convex or concave sheets which are a source of wrinkles. A vacuum system keeps the back end of the sheet flat as it is being drawn through the impression cylinder. After traveling through the press, the sheet finally is released to the delivery, geared at one-half the press speed, thus allowing the sheets to be piled and jogged evenly.

The dampening and inking system offers no new features. It is known that these presses will operate at 6,000 impressions per hour on stock above 39# basis and below 12 point folding box stock. Lower speeds apply for lighter and heavier stocks.

2. The A.T.F. Mann

The next press is the one now sponsored by American Type Founders, Elizabeth, N. J. The Mann offset press is made in England but sold and serviced exclusively in the United States by A.T.F.

This press was first prominently shown to the industry at the last graphic arts exposition in Chicago. It has many of its own features that should be pointed out to you. These presses are offered in single and two-color sizes 42″ x 59″ and 43″ x 65″.

They feature the floating impression. This means that there is no cylinder bearer contact. The cylinders are supported on their own journals and a micrometer cylinder setting device adjusts the pressure between blanket and impression cylinders. This can be done from one side while the press is in motion.

The blanket cylinder is undercut to allow for a double blanket which it is claimed gives extra resiliency, minimizes bulge and creep, adds a factor of safety and improves the quality as well as allowing longer press plate runs.

The press is equipped with helical gears for quiet operation, and a split gear to allow for adjustment of backlash and play. The feeder is of the conventional stream-feed, which feeds sheets at 25 percent of press speed.

On the single-color press the sheet is fed to the impression cylinder by a swing feed which takes the sheet at the feed board and accelerates it to synchronize with the speed of the impression cylinder.

Here's author Littman's quick guide for alloting space in your new litho plant (with sheet-fed presses):

PRESSROOM 25%
SERVICE DEPARTMENTS (camera, plate, etc.) 25%
PAPER STORAGE, shipping, office, finishing, etc. 50%

The two-color press has an advancing cylinder which transfers the sheet to a single impression cylinder for both blanket impressions. The sheet is thus printed by a transfer from four sets of gripper bars. These presses have a few more features that should be touched upon. They are equipped with a built-in wash-up device, a hydrostatic water level control, plate preclamping bars, and an automatic lubrication device to oil all major bearing and friction surfaces through a Bijur forced-feed system. The delivery, inking and damper systems offer no unusual features. The rated speed of this press is about 5,000 on onion skin to .040.

3. Miehle Presses

The Miehle Printing Press and Manufacturing Co., of Chicago, is one of our better known manufacturers of sheet-fed offset presses.

Miehle offset presses are made in two large sizes known as the 61 and 76 offset, which handle 42″ x 58″ and 52″ x 76″ maximum size sheets, and are made in single-color to four-colors called unit construction.

These presses feature such items as the three point register system through a swing feed to the impression cylinder and its transfer through three small transfer cylinders each with its own gripper bar to the next impression cylinder and so on until delivered to the pile delivery.

The automatic streamlined feeder is made by the Dexter Folder Co. The sheets are delivered to the feed board through front and back suckers — no combers are needed to help pick up the sheets. The sheets then advance down the feed board to the stops at the swing feed-in time. There is an advancing or retarding mechanism on the feed-board to help control the sheet. The sheet then is registered and swung into the impression cylinder.

To handle a sheet through a two-color press requires a seven gripper bar transfer to deliver it to the automatic pile delivery. Upon entering the delivery, the front edge of the sheet is lowered by means of fingers to the pile, while a rotating vacuum bar controls the back edge. The press cylinders are operated on bearer contact and backlash is controlled through a special gear.

The usual damper and inking systems are to be found on the Miehle press. However, automatic lubrication to the major bearing and friction points is incorporated in these presses.

The 61 press operates at speeds up to 6500 i.p.h. and the 76 press up to 6000 i.p.h.

4. Harris-Seybold

The last of the larger sheet-fed press manufacturers to be discussed is the Harris-Seybold Co., Cleveland. There are probably more large Harris presses in operation in this country than all of the others combined.

Large Harris presses are made in 43″ x 59″, 51″ x 73″ and 52½″ x 77″ maximum sheet sizes, and are made in single-color to five-color.

These presses feature the feed cam roll system with feed-in and advancing cylinder to the impression cylinder and a double transfer cylinder

between printing units, the sheet being transferred from cylinder to cylinder by means of gripper bar fingers. Five sets of bars are required to hand a sheet through a two-color press to deliver it to the delivery bar gripper and then to a pile delivery.

These presses are operated on bearer to bearer contact and backlash is controlled by a special gear on the plate and blanket cylinders.

The feeder is streamlined. Sheets are picked up by means of combers and suckers and forwarded down the feed board to the front-stop. Register is helped by means of the retarding or advancing mechanism and the bowing of the stops to control the back of the sheets. The feed cam rollers drive the sheet up to the stops where the grippers then take the sheet and carry it to an advancing cylinder to clear it for the following sheet. The use of the Geneva motion allows for a smooth motion of this feed-in cylinder and allows the advancing cylinder to take the sheet from the feed-in cylinder which registers the sheet at a dead stop and accelerates it to the same speed of the advancing cylinder.

The delivery and damper motion are of the conventional type. The inking system has recently been improved to allow for a more uniform distribution of ink. Its ink travel and varying form roller diameters have helped eliminate ghosting.

The 59″ press operates at speeds up to 6500 i.p.h. while the 73″ and 77″ presses are rated at 6000 i.p.h.

Other Equipment

Now that you have selected a press, or presses, to run your larger size sheets, you will have to give your attention also to the selection of the equipment necessary for negatives, positives, plate proving and graining to handle the larger size press plates needed.

Your camera will have to be selected individually by you. Size of copy, unit size you photograph and use of half-tones must be considered. Most multi-color work requires the use of half-tones.

There are several good manufacturers of these cameras and you can select the one which will fit your requirements. Lanston Monotype, Robertson, Consolidated Photo Engraving and Lithographic Equipment Co., Rutherford Machinery Co., Chemco Photo Products, ATF and many others offer excellent ones for your selection. Your photographic foreman will be helpful in assisting in this selection.

Going into color reproduction also will call for proving presses if you have not already equipped yourself with one. It is cheaper to prove your jobs on a proof press, although there is a difference of opinion about this among some companies. From my experience, if you do have a small power press to prove your jobs, you are always scheduling production work for this press and then the proving work has to wait. This will, of course, cause a delay and may tie up proper scheduling of work.

The selection of a proving press can be confined to a power driven cylinder. Such companies as Rutherford, Wagner, and Amsterdam should be investigated.

There are problems in using a proof press with automatic dampening and inking mechanisms because it requires a long time to obtain the proper distribution of water and ink for the number of sheets required for a proof.

To make the plates for these larger presses requires larger vacuum frames, developing troughs, down draft tables, photo-composing machines and plate coaters.

The selection of this type of equipment becomes a matter of choice. When choosing a photo-composing machine you may select from the Rutherford Machinery Co. and the Lanston Monotype Machine Co. These machines are precision built and will step and repeat your negatives and positives for color plates with a high degree of accuracy. The use of light integraters, both on vacuum frames, cameras and photo-composing machines, is essential to quality work and uniformity of reproduction.

Plate Coaters

Plate coaters, both the vertical and horizontal type, are in use in most large shops. It is a matter of space. Either one will give you good results. The vertical coater is exclusively a Lanston Monotype manufacture, while the horizontal coaters are made by many of the well-known photo-mechanical equipment manufacturers.

You will of course select a grainer. The usual machine employed in 99 percent of the shops is made by the Zarkin Machine Co. However, various ideas have been introduced to improve on this method. Up to the present, we have not found any successful enough to supplant the use of marbles and sand — I use this phrase literally.

It would be my recommendation to you that you give serious consideration to humidity and air conditioning in your process departments. A constant temperature and humidity is essential to good results. Of course, if you can afford to do so, the pressroom should be air-conditioned also. If you do air condition this department you will certainly have to get your paper suppliers to see that they send in paper that is in equilibrium with your pressroom.

You have now selected your new equipment. If you are moving into your new plant and you have your layout carefully planned, my final advice to you will be to hire yourself a capable company to do this work for you — one well qualified to handle offset equipment and above all an offset technician of your own to see that the work is done efficiently and well. This will save you a lot of headaches later.★

When you decide to move, plan carefully, says the author, who has done it twice.

ML Special Series: Part 3

Paper for Offset

How High Quality Offset Paper is Made

by R. H. Doughty

Technical Superintendent, Fitchburg Paper Co.

QUALITY requirements of paper for offset are perhaps more rigid than for any other sheet that might be considered a mass production item. As the volume of offset paper produced steadily increases, requirements for satisfactory use become more strict. Larger and higher speed presses and normal demand for quality (which usually means a little increase in quality over the best considered attainable in the recent past) makes this inevitable. This, after all, is how an industry grows and progresses.

How it's Done

Offset paper is basically a mat of cellulose fibers, carrying a quantity of loading pigment that contributes considerably to its opacity, color and surface. These fibers have been mechanically treated so that they can be formed into a uniform sheet structure and so that they will adhere to one another on drying to give a sheet with mechanical strength. An internal sizing material has been added which after thorough mixing is fixed on the fibers by addition of aluminum sulfate, (alum, to the paper-maker) so that the dry sheet will not be too receptive to water or too readily softened by it. Dyes or color pigments are also added, even to white papers, to give the desired shade. All this is done in the presence of water; the solids content of the pulp slurry coming to the paper machine ranging from three to six percent. At the paper machine the stock is further diluted so that it carries one percent or less of fiber and filler. This dilute suspension is run out onto an endless wire belt, (the Fourdrinier wire) where much of the water is removed by drainage and suction; transferred to an endless felt on which it is run between press rolls to remove more of the water, and finally transferred again to a series of heated dryers where the balance of the unnecessary water is removed by evaporation. Somewhere in the course of the drying the paper is tub-sized, generally with a starch solution, to give a firm but pliable surface, and after drying it is compacted, smoothed and more or less polished by a series of heavy chilled iron rolls in a calender stack. All this goes on at speeds of from two or three up to 10 or 15 miles per hour, and in widths ranging from 10 to 15 feet or even wider. All that is left to do is to slit and wind the sheet into rolls of suitable width, cut these rolls to approximately sheet size, guillotine-trim them to accurate size and square, and pack them, properly ream counted, marked, wrapped and labelled, into skids, cases, or other packages for shipment to the printer. Here errors or oversights in manufacture, if any, are discovered.

This production review is for uncoated offset such as made at Fitchburg Paper Co. Coated offset paper starts with a suitable base stock which is coated, dried and finished for use.

It is obvious that paper manufacturing is a complex process, with a great many variable factors including type and quality of pulps used, and ability and experience of those who operate the equipment and inspect the product.

Know Your End Use

Basic to the production of good quality offset paper is a thorough understanding, by the manufacturer, of the detailed requirements of the particular lithographing job and its end use. Test procedures are available to the mill by which the properties of moisture content, strength, surface firmness, color, brightness and opacity, weight, thickness, surface structure, acidity, ink receptivity and absorption, compressibility, stiffness, and folding quality can be measured. Operating experience has taught how these can be controlled at required levels. Other important properties such as cleanliness, freedom from lint or dust, and formation, are determined by visual inspection with reference to standard samples known to be of satisfactory quality. Dimensional stability under press conditions, and freedom from curl, are properties of basic importance, which are kept within safe limits by proper selection of materials and control of machine operation. The limits for all these properties must be found for each use by trial and error, or deduced from tests of samples or by reference to the behavior on the particular job of a sheet of which the properties are known.

It is forgotten sometimes that in specifying paper, the properties of basic weight, thickness, finish, filler content and opacity are closely inter-

related. These relations are especially important in the case of paper for books to be bound, which must have a well-controlled page count. Care has to be taken that orders are not accepted involving a combination of weight, bulk and finish which cannot be produced in a practical way in the paper mill.

Keep Clean

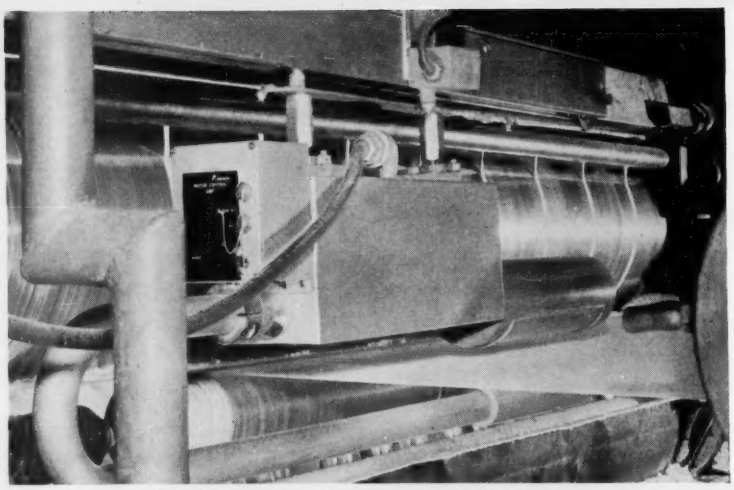
New materials are coming into use which can help to improve old papers and produce new ones. Pulps of improved brightness with good strength and other characteristics are particularly useful. The converting mill which can purchase and blend a variety of pulps from numerous sources can obtain a definite advantage in this way. Suppliers of paper-making chemicals also are making available new materials such as improved starches for use in the beater and size tub, wet-strength and dry-strength resins that can be applied in various ways, and new types of special fillers.

Cleanliness is certainly important in any paper. It is dependent on quality of raw materials, mill equipment, and good housekeeping in the mill. Improved screening and other dirt-removing equipment has been and is being applied to produce cleaner pulps and to keep dirt out of the paper stock and the sizing solutions. An important contribution to good housekeeping has been the development by the chemical industry of efficient bactericides and fungicides which can be added to the stock in process. These circulate with the water through the mill system, to prevent the growth of slimes which could otherwise be very damaging to appearance and quality.

Automatic Controls

Uniformity of product appears to us to be just as important as the proper quality level. This uniformity starts with a standard furnish or mixture of raw materials put into the process, and includes control of mechanical processing. It also includes continuous measurement and control of pH and of moisture.

A fairly recent development of considerable value to the paper-maker is in the field of automatic and continuous basic weight measurement and control. In any paper mill, fluid stock is added to one end of the paper-making system at a rate intended to be constant, with the expectation that a sheet of uniform weight will come out the other end, and with a full realization that without weight uniformity other sheet properties can never be kept uniform. Previously, in weight control, dependence was put in samples taken from the travelling web at intervals, supplemented by detailed study of variations within reams of paper. Taking a sample always involves waste of paper, and under the best procedures these samples might be literally a mile or more apart in the travelling web of paper, leaving open the question of what has happened between samples.



Beta-Ray Measuring Head on sheet at the size press

Several instrument makers have put devices on the market that give a continuous record of the weight of the running sheet, based on the principle that paper sets up a barrier to beta-radiation from a radio-active source, and that this barrier effect varies in direct ratio to weight. The instrument not only measures and records the weight, but can be arranged to control the flow of stock to the machine, in such a way as to correct any tendency to weight variation before it becomes great enough to result in off-quality paper. If the control does fail for any reason, the record will pinpoint the location of the off-weight paper so that it can be kept from shipment.

The Beta Gage will also measure weight across the sheet, assuring that the levelness so important to proper printing results is maintained in that direction as well as along the web. Units installed at Fitchburg have definitely proved their value in operation.

New Papers from Fitchburg

The paper manufacturer must always be working, not only to maintain or improve the quality of his products, but to introduce new ones to meet the needs of lithographers and of their customers. Two new papers introduced recently by Fitchburg are "Fitchburg Vellum" and "Fitchburg Parchment."

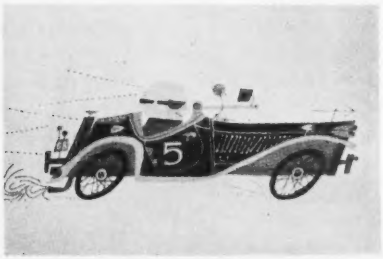
The Vellum sheet is available in white and colors. The Parchment is made in natural and several tints and in a wide range of basic weights. With the appearance and general characteristics of parchment, it has been developed to work on the press like a standard offset paper, with freedom from feed and register troubles even in large sheet sizes.

New and improved equipment, materials, and control techniques in the paper mill, and continued study of the requirements of use in co-operation with the printer and his customer, result in improved performance and a steadily broadening field of use for offset papers.★

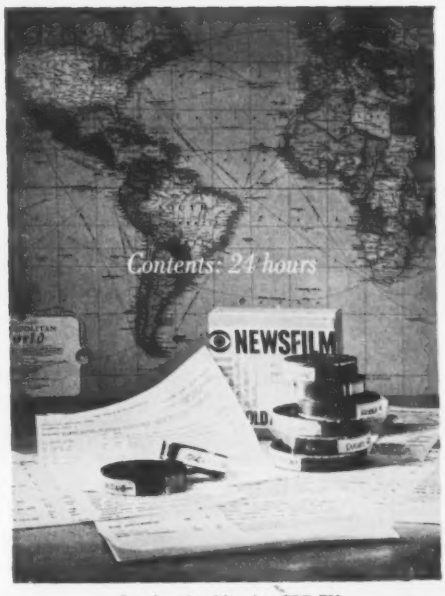
AIGA Winners | Lithography, Crafton Graphic

Booklet for CBS Television.

Folder for Wm. S. Merrell Co.



Sample folder: Naiad Einsekl.



Another booklet for CBS TV.

OFFSET leads the graphic arts and Crafton Graphic Co., Inc., leads the offset field in the AIGA Design and Printing for Commerce Exhibition now touring the United States.

Of the 188 Certificates of Excellence awarded in this year's contest, 98 of them went to entries produced entirely by offset and another 15 to pieces that were produced in part by the process. In other words, lithography is credited with a little more than half the winners by itself, and 60 percent of them when the mixed entries are counted. Some Crafton winners are shown above.

An examination of the awards booklet shows that offset still is on the ascendancy and is responsible for producing an ever varied number of direct mail folders, brochures, annual reports, catalogs, sales material, house organs, record jackets, letterheads and other pieces.

The part Crafton Graphic played in the exhibit is highly impressive, with 19 winners attributed to this New York

(*Continued on Page* 149)

"GOOD LUCK" says outgoing president George Erikson (l.) to new president Paul Hartsuch.

TAGA Elects Hartsuch

Registration at 245 in Boston

THE keen New England wit of John Gould, principal speaker at TAGA's 7th annual banquet May 9, lent an air of lightness and humor to an otherwise highly technical, serious meeting of TAGA in Boston, Hotel Somerset, May 9-11. Drawing on his years of frustrating experience reading government technical publications, Mr. Gould read some excerpts from these leaflets and manuals and then capped the evening's talk by presenting a satire on such publications, a "government bulletin to end all government bulletins."

Merrill Friend, chairman of the 1955 convention, welcomed registrants, especially those who had travelled a great distance to attend, including: Gordon Allen and F. G. Good, London, England; Oskar Thursland, Sweden; and Messrs. Chapman, Neugebauer, Rudell and Strocki from Montreal. Others were Messrs. Carroll from San Diego, Calif., Jones from Texas, and Robinson from St. Petersburg, Fla.

George Erikson, outgoing president, introduced the head table: R. M. Schaffert, George Hammer, Philip Tobias, William Reed, Paul Hartsuch, F. Preucil, Joseph Ulrich, Robert Rossell, V. P. Barta and Merrill Friend.

Committee reports were heard at the business meeting Tuesday noon, with Bob Rossell, membership chairman announcing 65 new members enrolled during the last twelve months. Represented were men from fourteen states, four foreign countries, District of Columbia and Brooklyn, according to Mr. Rossell. Five additional applications were received at convention headquarters.

Bob Leekley, Papers Committee chairman, announced a change in the method of distributing TAGA papers presented at the annual convention. Next year under the new system, TAGA will publish the proceedings as pre-prints. This means an advance in deadlines for authors. December 1 will be the deadline for abstracts of prospective papers, and Feb. 1 will be the ultimate deadline for manuscripts accepted for presentation. Supplemental discussion notes taken at convention time will be printed later in the year as an addendum to the proceedings. The extended delays noted in past years in getting the proceedings printed should now be eliminated, according to Mr. Leekley. George Hammer was cited for his valiant efforts in past years to get these papers together, printed and distributed with the minimum of lost time.

Merrill Friend, chairman of this convention, reported that total registration had reached 245 and asked members to give a vote of thanks to the publicity and arrangements committee.

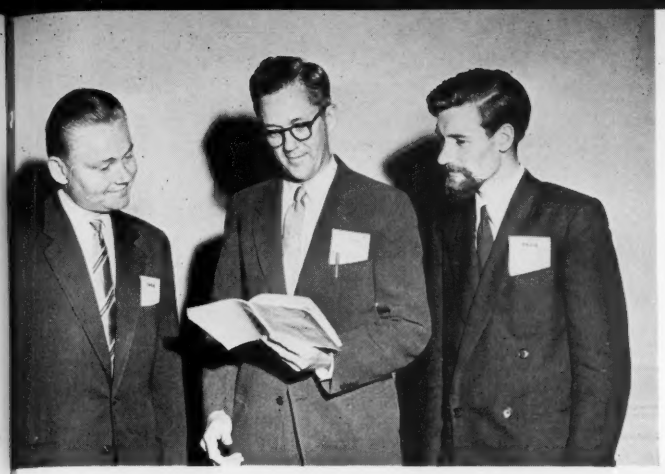
The color committee, Don Smith, chairman, will cooperate with the Inter-Society Color Council in their 1956 program, April 5-6, New York. Scheduled for discussion during the two-day symposium are the following topics:

(1) Color reproduction processes and the graphic arts
(2) Color reproduction, general
(3) Color correction and masking
(4) Color correction by scanning
(5) Color control in the pressroom
(6) Ink control in the pressroom
(7) Paper control in the pressroom
(8) Mechanical control and limitations
(9) Use of color standards and systems
(10) Packaging and styling
(11) Lighting
(12) Role of the art director

New officers for the coming year introduced by George Erikson, outgoing president, are: Paul J. Hartsuch, president; Robert E. Rossell, first vice president; V. P. Barta, second vice president; and Philip E. Tobias, secretary-treasurer. New members of the board of directors are George Hammer and William Reed.

New committee chairmen for 1956 named by the president are: policy—George Hammer; newsletter — Wil-

(*Continued on Page* 147)



CONTINENTAL ATMOSPHERE was given to the convention by visitors from Europe. Left to right are: Oskar Thorslund, Stockholm, Sweden; Robert Leekley, TAGA; and Gordon S. Allen, London, England. Mr. Allen is chief research engineer for J. F. Crosfield, Ltd.

HISTORY - MAKER Jacqueline Fetsko, first woman to present a paper at TAGA, discusses her talk with William Walker (l.) both from National Printing Ink Research Institute, and Jack Kronenberg, S. D. Warren Co., presiding chairman of the afternoon session.

FUTURE CONVENTION CHAIRMEN Mike Bruno (center) 1956, and Joe Mazzaferri, (r.) 1957, get pointers from Merrill Friend, chairman of this convention.

TAGA'S TOP BRASS for 1956, officers and board of directors, are: (l. to r.) Robert E. Rossell, first vice president; George Hammer; V. P. Barta, second vice president; George Erikson; Paul Hartsuch, president; William Reed; and Philip Tobias, secretary treasurer.

"Research to Bring Golden Era"

Says George Olmstead Jr., Keynote Speaker at R & E Council's Convention in Boston

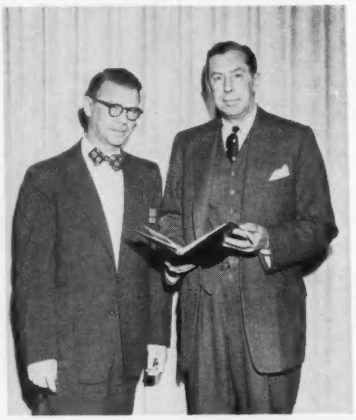
AFTER a day of plant tours in the Boston area, over 138 registrants at Research and Engineering Council's fifth annual meeting, Hotel Somerset, Boston, settled down for two days of intensive study and discussion, May 12 and 13. Attracting much attention in the foyer were exhibits of Eastman's three-color process, LTF projectograph showing slides of developments from the research department, National Safety Council's poster campaign for safety in the pressroom, and samples of Lithocraft, Inc. presswork.

Officers for 1956 will be the same as last year, it was announced following the meeting of the executive committee. John H. Davis, Jr., vice president and secretary of Judd & Detweiler, Inc., Wash., D. C., will remain as president of the Council; Sam F. Chernoble, The Comet Press, Inc., New York, is vice president; Felton Colwell, The Colwell Press, Minneapolis, is also vice president; Homer Winkler, Battelle Memorial Institute, secretary; and Joseph Schwartz, Westcott & Thomson, Inc., Philadelphia, is treasurer.

Keynote speaker opening the convention on Thursday morning was George Olmstead, Jr., president, S. D. Warren Co., who told members that the New England area was well chosen for a conclave of technical men since more than $450 million dollars was spent on research there last year and the total is rising. Research and necessity go together like bread and butter, he said, citing "Boss" Kettering's definition of research as:

"Research tells you what to do when you can no longer keep on doing what you are doing." Competition makes it necessary for businessmen to engage in extensive research programs, he declared.

"In mature industries, like graphic arts and paper, applied research rather than fundamental research is the type we should be spending our time and money on," he said. Lessons learned by S. D. Warren regarding research were listed by Mr. Olmstead as:



Discussing presentation of the Fifth annual convention program are John Davis, Jr. (l.), president of R & E Council, and keynote speaker George Olmstead Jr., president, S. D. Warren Co.

(a) It takes 15 years to build an effective laboratory. Between 1960 and 1970 when all the research programs initiated after World War II and the Korean war mature to 15 years and older, we should have a "golden era."

(b) Policy must be adopted to divide the work into a certain percent of time on old problems and on new investigations. About 2/3 on new and 1/3 on odd studies seems desirable.

(c) Screening system is needed to weed out poor-risk programs of research. S. D. Warren has a committee to do this job composed of sales, production, research, and engineering representatives.

(d) Research programs must be coordinated with suppliers. Any study involving products commercially supplied should be discussed with those organizations producing and marketing the materials. Much duplicate effort can be avoided if suppliers are consulted.

Thanks was expressed to Mr. Olmstead for launching the meeting and for his company's hospitality at the plant tour of S. D. Warren the preceding day. Forty-eight members of R & E Council and TAGA (convening the same week in Boston) took the trip to Cumberland.

Included in the "Illumination" symposium Friday morning, Dwight Monaco, chairman, were the following papers: "Illumination Design for Color Work," George W. Clark, Sylvania Electric Products, Inc.; "Lighting in the Printing Industry," Ralph R. Enghouser, Sylvania Electric Products, Inc.; and "Painting," Francis Scofield, National Paint, Varnish and Lacquer Association. Sylvania's illumination boxes were displayed, showing scenes in color under varied light sources. Said Sylvania's George Clark, "Lithographers and printers should make a color match in the type of light under which the piece will ultimately be viewed. Besides this, the color must be pleasing and faithfully reflect the artist's original intent."

Although convention plans for 1956 are not yet crystallized, Robert Rossell, convention chairman, said that Chicago would be the site and the dates will be May 9-11 to mesh with

plans of the TAGA convention, in May, in that city.

C. M. Flint, formerly research director of ANPA and now with Charles T. Main, Inc., Boston, was chairman of the first day's program and read progress reports of research and engineering activities in graphic arts. Subsequent issues of MODERN LITHOGRAPHY will carry the full text of papers of most direct interest to lithographers. Following are abstracts of some of the progress reports (others to follow in later issues):

Minnesota Mining & Manufacturing Co., by C. L. Jewett, technical director, Printing Products division.

Research to improve Spherekote brand tympan covers, blankets and drawsheets and the 3M brand presensitized aluminum photo offset plate has been done in the past year.

Progress has been made in the development and application of the new 3M makeready process for letterpress printers. (The process was demonstrated in 3M's suite during the two-day convention.)

"Scotch" brand double coated tapes have been improved and the current construction using a new liner, has improved holding power and lengthened shelf life.

"Scotch" brand pressure sensitive tapes are being evaluated for eliminating string tying of type. Success is being obtained where suitable jigs, dispensers, etc., are used for holding the type while applying the tape. This work is being carried on in cooperation with the R. & E. Sub-Committee on Project 10. The Tape division of 3M has prepared and issued a Graphic Arts' Industry Manual, which illustrates the uses for pressure sensitive tapes, including stripping, opaquing, edging, and masking.

New uses for 3M brand presensitized plate, include the use of the plate itself for name plates, metal templates, wiring diagrams, scales and the like where photographic applications for aluminum are involved.

Research on disposable paper dampening roll covers led to the discovery that pure vegetable parchment has many desirable properties for this purpose. This work was reported in the Feb., 1955 issue of ML.

Chem-Dry Process, Armour Research Foundation of Illinois Institute of Technology, by John D. Keane, assistant supervisor, Chemical Engineering section.

A new method for rapidly drying inks, paints and varnishes was developed by Armour Research Foundation in a special project conducted for the Meyercord Co., Chicago. The process is based on the discovery that printed films containing ordinary drying oils and resins can be hardened in about one second by passing through a chamber containing sulfur dichloride vapor. Two commercial pilot plants have been placed in operation on printing and coating steel and wood. These have demonstrated that the actual equipment necessary can be both compact and inexpensive. Also, it has been shown that the drying time required for hardening inks on non-absorptive surfaces such as coated papers, plastics, and painted surfaces is even shorter than had been believed. Coatings which now require several hours before handling can be Chem-Dried in about one second without the use of any powders or slipsheets. Work currently under way indicates that superior films can be produced without accompanying corrosion or paper damage. During the next year it is hoped to carry this development to a point where package Chem-Dry units can be installed on a routine basis in commercial printing and coating lines.

Officers re-elected for 1956 at R & E's Boston convention are (l. to r.) Sam Chernoble, vice president; John Davis Jr., president; and Homer Winkler, secretary. Also returned to office were Felton Colwell, vice president, and Joseph Schwartz, treasurer.

Aeronautical Chart and Information Center, Air Photographic and Charting Service (Mats), United States Air Force, by Lewis A. Nugent, chief, Reproduction division. "Variable Density Contours With Composited Photo Mosaics." A technique for the compositing of contact and projected copy photomechanically by means of an auxiliary transparent camera back has been developed, which requires a darkroom type camera equipped with a compositing device. It includes a vacuum back with double vacuum channels and the ability to rotate so that multiple compositing of both projected and contact materials can be accomplished with comparatively fine registration. Complete procedure is outlined in ACIC Technical Report 69, published by the Aeronautical Chart and Information Center, Air Photographic and Charting Service (MATS), United States Air Force, St. Louis 18, Missouri.

"LAC Strip Technique of Color Separation." LAC Strip is a technique developed for preparing gradient tints by photomechanical processes of etching and washing in the production of maps and charts. This technique uses a contour line image to delineate individual tint areas and eliminates the difficulty of precise inking along the limits of each tint.

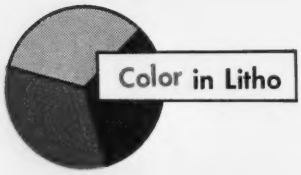
LAC Strip is a strippable lacquer coating which can be applied on a conventional whirler to Mylar 750 polyester sheeting. Complete procedure is detailed in ACIC Technical Report No. 62.

"Photo Mechanical Vignetting." A mechanical procedure to eliminate inconsistencies in quality in present manual methods of vignetting has been developed. "Vignetted" bands of tint are used to delineate outlines of objects or features for purposes of emphasis or transitional fade-out.

The procedure, detailed in ACIC Technical Report No. 61 will produce a vignette band ranging from 0.1 to 1.0 inch, as desired. Control of the width of the band is not 100 per cent complete, since half of the controlling element is in the enlargement ratio of the vignetted area. The procedure does control the over-all tone de-

(Continued on Page 149)

Les Goda, Jr., Eastman Kodak, and Felton Colwell, The Colwell Press, view exhibits in the foyer between sessions of progress reports in the Hotel Somerset' Princess Room.



Progress of 3-Color Examined at RIT

FOR the advertiser who couldn't normally afford color and for the lithographer who is looking for a virtually untapped source of color litho business, the short-run three-color process may be just the thing. It's a complicated process, however, and lithographers need to know what they are doing before they start. In April some of the chief researchers of the short-run process and some of the lithographers who are using it, got together at Rochester Institute of Technology for a symposium on the technical, practical and business aspects of the field. At the sessions, 84 men from 40 firms heard these reports:

Technical

DR. C. J. STAUD, *Eastman Kodak:* Reviewed history and development of the three-color system. Dr. C. E. K. Mees, he said, sparked Kodak's work beginning about 1944. Preliminary

Dr. C. J. Staud

experimentation was interrupted by the war, and the first serious efforts began in 1947. Standardization of sizes and procedures was emphasized from the start to reduce cost. By 1951 the system had been firmly outlined and the major problems isolated, so that tests could be made in a Rochester commercial plant.

In the development of the three-color system, an important Kodak decision was to eliminate the conventional black printer. Offset lithography was chosen as the process because the equipment is simple and because available speed is quite adequate for the short runs intended. Commercial inks were found poorly suited to the process, and ink manufacturers were invited to develop special three-color inks.

Evolution of the present Kodak system depended on several inventions: the contact screen, simple masking methods, register control devices, automatic equipment for flash exposure and means of holding films. Further development can be expected in automatic equipment aimed at cost reduction and improvement of quality.

Dr. Staud said Kodak will continue its efforts to combine standardization and technology for the benefit of low-cost short-run color reproduction. "We have no illusions about quality," he stated, "it is not the best, but it is the best that can be achieved at a price, and is adequate for its intended purpose."

DR. HENRY C. STAEHLE, *Eastman Kodak:* Pointed out the need for short-run color by showing several recent books. "Three of these would be better books if they had illustrations, and they would be still better if the illustrations were in color," he said. "For some other books black-and-white is a poor apology. They really need color."

Commercial color printing in editions of 1000 or less is prohibitively expensive by conventional methods. Kodak's goal has been to reduce book illustration costs by a fraction of 10. He detailed requirements of a printing system which might accomplish this goal, based on 35 mm color slides.

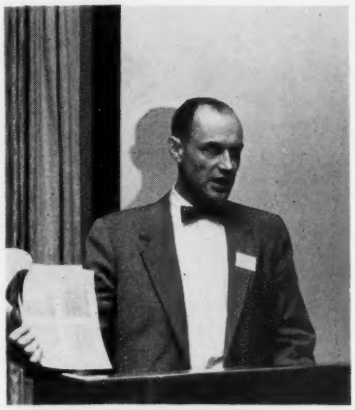
DAVID JOHNSON, *Princeton Polychrome Press:* Discussed quality of transparencies and evaluation before separation. Emphasized that the best color originals are slightly underexposed. Open shadows, with good tone separation and good highlight detail are prerequisites to pleasing reproductions. Printers need to work with customers and educate them to the possibilities and limitations of three-color printing. (Jan. ML, p. 38.)

FRANKLIN R. CLAPPER, *Eastman Kodak:* Covered in detail theoretical and technical considerations of the Kodak system. "While many variations and applications are being utilized," he said, "there are two fundamental principles that must be retained if we are to consider them all under one heading." First, the system must require no handwork at any stage, and second, specially selected inks must be employed to give satisfactory reproduction of hue and produce balanced neutrals. With the use of these inks and a single unsharp contrast-reducing mask, color brightness is controlled and the reproduced tones are satisfactory.

Practical

CHESTER J. NOWAK, *Eastman Kodak:* Detailed various techniques for preparing masks and separation negatives. He pointed out that carefully controlled exposure and processing are required to avoid remaking negatives.

JOHN W. GOSLING, *Eastman Kodak:* Rigid control of all steps is the best guarantee of success. "Artificial compensations such as handwork on plates or changing of press or inks to suit

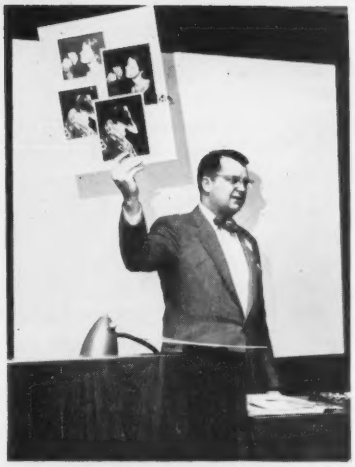


John W. Gosling

a specific picture," he stated, "must be absolutely ruled out." The LTF sensitivity guide or a similar step wedge is an aid to tone control.

"Another key to cost reduction is the automatic register of all images," said Mr. Gosling. Pin register systems are used for original, mask, negatives, plates and press cylinder. Because of this, the press can be operated for several weeks without adjustment of register.

WARREN L. RHODES, *Rochester Institute of Technology:* With the aid of pairs of reproductions thrown on the screen, he discussed evaluation of the final reproduction. "Evaluation implies first deciding whether the reproduction is satisfactory or unsatisfactory, then analyzing the factors which contributed to success or failure. The best reproduction is probably the one accepted by most of the people whom we are trying to influence, which makes that first decision more difficult than it appears." Exposure errors, photographic errors, contrast, density and density range were illustrated with slides.

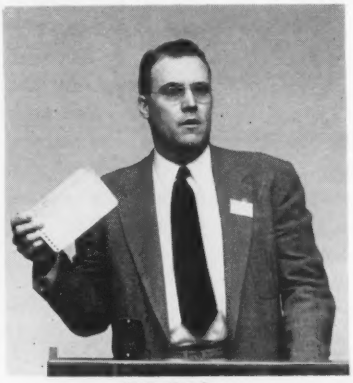


Warren L. Rhodes

H. B. ARCHER, *University Microfilms, Ann Arbor, Mich.:* Discussed statistical quality control and process control by instrumentation. Also explained the operation of the ink distribution meter which he developed while employed at R.I.T.

Business

V. L. GARDNER, *Lithochrome Corp., Erie, Pa.:* Discussed profit planning for the three-color system. "We are not using three-color as a substitute for high-quality four-color printing,"



V. L. Gardner

he said. "Rather, we are opening a new market by selling three-color to those who have previously used one or two colors in illustrations."

LESTER E. GODA, *Eastman Kodak:* Presented slides showing many items of equipment suitable for printing. Presses, temperature-control sinks and other necessities are available from various manufacturers. Two firms offer color-separation cameras which were on display during the symposium. The Three Color Process Camera made by the Douthitt Corp. is handled by the Short Run Color Corporation of Detroit, he said.

The Photostat-Microtonics camera is manufactured and sold by the Photostat Corp. It is distributed also through Princeton Polychrome Press, Princeton, N. J. Both of these instruments are specially designed for short-run color work. Kodak's camera was specially designed and built for experimental use and no commercial models are planned. Drawings and instructions can be purchased through the Graphic Reproduction Sales Division by those who wish to modify existing duplicators as Kodak has done, he stated. This Division also can supply punches and pins for register control.

HERBERT MORROW, *RIT*, moderated discussion of organization, management, and sales in a three-color installation. Panel members were GEORGE CAMERON, *Princeton Polychrome Press,* JAMES MUSSON, *Colwell Press,* V. L. GARDNER, *Lithochrome Corp.,* MR. GODA and CARL DANIELS, *Short Run Color Corp.:* For effective operation, it should be observed that a single separation camera can provide negatives for several presses. Opinion among the panel members varied as to the number of presses with which a new installation should be supplied. Business could be started with one press or with about three, depending on anticipated volume. The minimum investment for a new business is around $25,000, in the opinion of Mr. Cameron. "If I were starting a new business I would estimate the time needed to get under way at six

Gardner, Cameron, Musson, Goda

months," he said, "and then double it. Planning of the business should be based on a survey of the market."

MR. RHODES, speaking again on current and future developments in

(*Continued on Page* 147)

Packaging for the Supermarket Age

by Gerald Stahl

Durabilt Travel Iron
Packaging that hides the product, making a secret of what the product is and for what it is used, is worse than a waste of money. Volumes of copy do not have to be used to make packaging an effective selling medium. The new Durabilt travel iron package wins many new customers, attracted by the colorful appeal of the package, and stimulated to select a Durabilt iron as a gift.

Van Zandt Cheese Line
Packaging for Van Zandt imported quality cheese products conveys a look of Old World quality and yet embodies proven principles of American dynamic point-of-sale merchandising.

Esquire Socks
Packaging should do more than just sell a brand name. It should sell the product. New Esquire Socks packaging utilizes space formerly wasted, to sell both the dealer and the consumer on why it is better than the competition.

SeaPak Frozen Fish
Brand name identity and "appetite appeal" are no longer enough to put a food product package ahead of competition. Packaging for the SeaPak frozen fish products embodies elements beyond appetite appeal alone to help attract attention. Unique use of symbolism in the form of a suggested fish net pattern and a fish motif plus fine reproduction of the prepared food, ready to eat, lend appetite appeal and interest.

WITH the advent and evolution of the supermarket system of point-of-sale merchandising, concepts of package design that existed only a few years ago are just as outmoded as the old reliance on just building a better mousetrap. Simply making a package prettier will not sell the product if it can't be seen. Simple reliance on the old cliches like appetite appeal, brand name identity, product identification, or clever art can lead to very serious and costly mistakes in this era of self-selection, impulse purchasing.

By relying on some of these outmoded criteria of packaging, package design has been turned into a battle with the pastry chef, the photographer, and the modern artist on one side, and the poor confused customer on the other. Manufacturers of products such as cake mixes, flour and sugar have been struggling to get bigger and better cakes on their packages — it has even reached the point where it takes two packages to show one cake! Food packers are acting like their sole packaging objective is to win an award for photography and reproduction. Beauty preparations and cosmetic packaging seems to be racing towards the ultimate in sophistication.

Buyer in a Trance

The end result of all these culinary triumphs, beautiful photography, clever art, and excellent reproduction is one great blur at the point-of-sale. In order to really make a package sell today, something more is needed.

Appetite appeal, brand and product identity, good art and lithography are fine as far as they go, but the supermarket age places still greater demands on the function of the package. In order to sell competitively under the conditions imposed by the self-selection system, a package has to be more than just as effective as the competition. A luscious looking cake won't sell cake mix if the packaging of every other brand of cake mix has just as luscious and just as big a cake. A big picture of

"garden-fresh" vegetables won't sell frozen vegetables if each packer of frozen vegetables is using equally good top notch photographers and lithographers to capture that "garden fresh" look. Manufacturers of home permanents and shampoos have reached the point of diminishing returns when the package for every brand of beauty preparation has become so artistically clever that they cancel each other out when arrayed on a retail counter or shelf.

Something more than art, photography, and good lithography is needed for the manufacturer who wants to capture a larger share of the market or even continue to compete favorably through effective use of packaging. Art, photography, and printing techniques are, of course, important elements of effective packaging.

How to Keep Ahead

The added ingredients needed to maintain packaging leadership are: a) merchandising strategy; b) point-of-sale psychology; and c) the ability to gauge consumer trends and buying habits. Expert packaging for today's marketing conditions requires more creative merchandising thinking, market analysis and sales strategy. Art and printing still remain the media of expression to convey a sales message. But successful packages in this supermarket age will come from designers and creative lithographers skilled and experienced in marketing and point-of-sale strategy.

The problem of capturing and maintaining a larger share of the available market for any product or line of products has become very complex. Today, millions can be made or lost through dealer and consumer reaction to packaging. Anyone concerned with packaging must be concerned with research, advertising, distribution, pricing, market analysis and consumer psychology. Efforts to use packaging as a means of "selling the sizzle instead of the steak" were a step in the right direction and effective for their day, but it was an over-simplification of the real problems in packaging. Too many attempts have been made at selling the "sizzle", the appetite appeal, the glamour of a product without adequate knowledge or understanding of what constitutes the true appeal of a product to its real market. The sales and advertising executives who judge a package in terms of their personal tastes and background — the package designer who is absorbed in the artistic merits of a package — the lithographer who sees only the quality of reproduction, are failing in their jobs and their responsibilities.

Successful packaging requires planning, study, experience, and unusual creative imagination. It requires expenditures of time, effort, and money; but the return on the investment can be huge. Americans today are buying on impulse. They are in a supermarket age. They can be sold.

Lithographers concerned with turning out effective packaging for today's market must think creatively, in terms of creative merchandising and point-of-sale strategy. And creative package thinking must be based on knowledge, experience and planning in terms of analysis of the market, dealer and consumer reaction, purchasing habits, and changing point-of-sale conditions. It will always remain for the artist and the lithographer to transform a package's selling message into tangible form. But merchandising and marketing strategy must provide the driving force for the development packaging created to meet the needs of a supermarket age.★

Gerald Stahl, one of the country's very successful package designers, is executive vice president of the Package Designers Council. Says Mr. Stahl, "To sell in this growing era of mass display, self selection and impulse buying, products must be packaged in a more dynamic, attractive, convincing manner than ever before."

Packaging can be attractive, distinctive and in good taste and still have a strong selling message. The Glamorene Upholstery Cleaner package gives the busy shopper a clear and easily understandable message as to what the product does, and how used.

'Operation Success'

Channel 4, April 23, 5 p.m.: William Winship (r.), vice president and general manager of Brett Lithographing Co., tells TV Man Quentin Reynolds about his company on "Operation Success."

TV Viewers See

Value of Offset

TELEVISION viewers on Saturday afternoon, April 23, saw a modern lithographic plant in action for the first time on any broadcast.

Quentin Reynolds, famed reporter, interviewed William Winship, vice president and general manager of Brett Lithographing Co. on WRCA's "Operation Success." Mr. Winship had been invited to participate as a guest on the program and to take the audience through the plant on a guided tour.

He told Reynolds that Brett Litho, 111 years old this year, "carries on its tradition of fine color printing with an always new and youthful viewpoint, and with all the modern equipment and scientific controls that recent research in printing can offer."

The plant trip started with the big cameras and proceeded through color correcting and platemaking. The fundamentals of the lithographic process were described in simple terms and many of the new developments in equipment shown in action.

Quality controls such as a densitometer, the pH meter and the sword hygrometer were demonstrated in use, and the cameras also were focused on the final sheet and piece inspection which insures uniformly perfect results.

This was the first time that thousands of viewers have had an opportunity to learn something about the methods which produce children's books, greeting cards, brochures, box wraps and many pieces of advertising printing that they handle every day.

The plant trip was photographed on 16mm color motion picture film. Brett will make the film available to educational institutions, trade associations and other interested groups.★

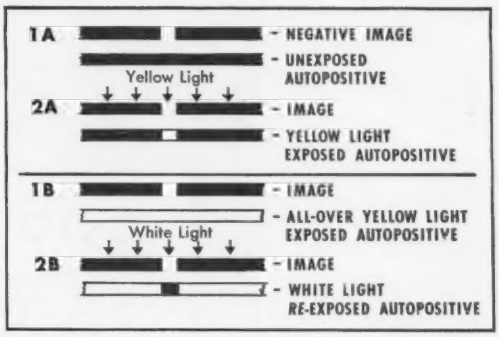
S & V Also Featured

TV fans got a chance to see how one of the big litho ink suppliers—Sinclair & Valentine Co.—makes its products on another "Operation Success" show May 7. Mr. Reynolds interviewed Matt J. Leckey, S&V president, who told of the 65-year-old company's history and expansion. A five-minute film showed how inks are made for a variety of uses in the Manhattan plant.

Kodak

News for Photolithographers

Autopositive Film and what makes it tick



Many of you have asked us how Kodak Autopositive Films and Plates work—why a negative printed on Autopositive Film yields a laterally reversed negative, and a positive a positive. Here, greatly simplified, is an explanation:

Autopositive Film is a funny critter—unused, it develops to total blackness. But set up as in diagram 1A, expose to yellow light through a negative, and you get a laterally reversed negative as in diagram 2A.

You can make a laterally reversed positive from the same negative by first giving the Autopositive emulsion a complete, all-over yellow-light exposure, and then placing it under the image, as in diagram 1B. Then turn on the white light and you re-expose the Autopositive emulsion, as in diagram 2B. This gives the equally helpful positive from negative, or negative from positive.

And—you can do both of these little tricks on one piece of film, without the use of a darkroom!

How you can take advantage of this

1. In your usual method of step-and-repeat work, a plate is printed onto metal, a block at a time. If this plate is to be remade, you must repeat the whole long operation. But use Autopositive Film for the multiple image and print from *this* to the metal, and the step becomes simple contact printing that you can repeat in minutes.

2. You can easily put hand line additions on straight negatives using Kodagraph Autopositive Film with a matte surface.

3. Photocomposition techniques are easily simplified with Autopositive Film—such as reverses in copy blocks, and positives and negatives on the same film.

4. Autopositive Film, because of its adaptability for photocomposition, eliminates bothersome double printing.

"Autopositive" is a trade-mark

Full selection

You can get Autopositive materials for four purposes. For precision work, there are Kodak Autopositive Plates. For quick proofing from positives, ask for Kodagraph Autopositive Paper. Where you need a clear, thin base, specify Kodak Autopositive Film. And for a matte surface, there is Kodagraph Autopositive Film. All come in a wide range of sizes.

Want more information?

Of course, your Kodak dealer and technical representative are always ready to answer your questions and help with your problems.

"Custom-calibrated" exposure computer

Here's an exposure computer that you can calibrate for your own particular camera. Intended for determining the exposures for making halftone negatives with the Kodak Contact Screen, it is also useful in calculating exposure times for color-separation negatives, making photographic enlargements in the process camera or enlarger, and for contact printing. Included with it is a Kodak Reflection Density Guide (a special photographic gray scale designed to use with the computer) and an instruction manual. Ask your Kodak dealer to let you try it out.

New edition of an old favorite

Same cover—revised contents—this just-published edition of *Kodak Materials for the Graphic Arts* will bring you up to the minute on our products. It gives their characteristics, processing data, sizes available, and the like; it also is a helpful guide, full of suggestions on what to use and how to use it for almost any job you'll get.

If you don't have a copy yet, ask your Kodak Graphic Arts dealer or write us for one.

Graphic Reproduction Sales Division • EASTMAN KODAK COMPANY, ROCHESTER 4, N.Y.

A BIG STEP FORWARD

YOU CAN NOW BUY AQUATEX DAMPABASE IN CUT LENGTHS

WITH GROMETS

WITH DRAW STRING

- SAVES TIME
- SAVES MONEY
- EASIER TO APPLY
- FIT TIGHT *and* SNUG

AQUATEX DAMPABASE®

PATENTED IN U.S.A.

GODFREY ROLLER CO.

Roller Makers for 90 Years

211-21 NORTH CAMAC STREET PHILADELPHIA 7, PA.

PAPER MERCHANTS
who sell and endorse
Warren's Standard Printing Papers

Albany, N. Y.	Hudson Valley Paper Company
Atlanta, Ga.	Sloan Paper Company
Baltimore, Md.	The Barton, Duer & Koch Paper Co.
Bangor, Maine	Brown & White Paper Company
Baton Rouge, La.	Louisiana Paper Company, Ltd.
Birmingham, Ala.	Sloan Paper Company
Boise, Idaho	Zellerbach Paper Company
Boston, Mass.	Storrs & Bement Company The Century Paper Co., Inc. Cook-Vivian-Lindenmeyr Co. Inc. Carter, Rice & Company Corp.
Buffalo, N. Y.	The Alling & Cory Company Franklin-Cowan Paper Company
Champaign, Ill.	Crescent Paper Company
Charlotte, N. C.	Caskie Paper Company, Inc. Virginia Paper Company, Inc.
Chattanooga, Tenn.	Southern Paper Company
Chicago, Ill.	Chicago Paper Company McIntosh Paper Company
Cincinnati, Ohio	The Diem & Wing Paper Company
Cleveland, Ohio	The Petrequin Paper Company The Alling & Cory Company
Columbus, Ohio	The Cincinnati Cordage & Paper Co.
Concord, N. H.	C. M. Rice Paper Company
Dallas, Texas	Olmsted-Kirk Company
Dayton, Ohio	Hull Paper Company
Denver, Colo.	Carpenter Paper Co.
Des Moines, Iowa	Western Newspaper Union Newhouse Paper Company
Detroit, Mich.	Seaman-Patrick Paper Company
Dubuque, Iowa	Newhouse Paper Company
Eugene, Ore.	Zellerbach Paper Company
Fort Worth, Texas	Olmsted-Kirk Company
Fresno, Cal.	Zellerbach Paper Company
Grand Rapids, Mich.	Quimby-Walstrom Paper Co.
Great Falls, Mont.	The John Leslie Paper Company
Harrisburg, Pa.	The Alling & Cory Company
Hartford, Conn.	Henry Lindenmeyr & Sons Storrs & Bement Company
Houston, Texas	L. S. Bosworth Company
Indianapolis, Ind.	Crescent Paper Company
Jackson, Miss.	Townsend Paper Company
Jacksonville, Fla.	Virginia Paper Company, Inc.
Kansas City, Mo.	Midwestern Paper Company Wertgame Paper Company
Knoxville, Tenn.	Southern Paper Company
Lansing, Mich.	The Weissinger Paper Company
Little Rock, Ark.	Western Newspaper Union Arkansas Paper Company
Los Angeles, Cal.	Zellerbach Paper Company
Louisville, Ky.	Miller Paper Company
Lynchburg, Va.	Caskie Paper Company, Inc.
Memphis, Tenn.	Southland Paper Company
Milwaukee, Wis.	Nackie Paper Company
Minneapolis, Minn.	The John Leslie Paper Company Newhouse Paper Company
Moline, Ill.	Newhouse Paper Company
Montgomery, Ala.	Weaver Paper Company
Nashville, Tenn.	Clements Paper Company
Newark, N. J.	Henry Lindenmeyr & Sons
New Haven, Conn.	Storrs & Bement Company Henry Lindenmeyr & Sons Bulkley, Dunton & Company
New Orleans, La.	Alco Paper Company, Inc.
New York City	Henry Lindenmeyr & Sons The Alling & Cory Company J. E. Linde Paper Company The Canfield Paper Company Marquardt & Company, Inc. Schlosser Paper Corporation Miller & Wright Paper Company
Oakland, Cal.	Zellerbach Paper Company
Oklahoma City, Okla.	Western Newspaper Union
Omaha, Neb.	Field Paper Company
Philadelphia, Pa.	D. L. Ward Company The J. L. N. Smythe Company Schuylkill Paper Company
Phoenix, Ariz.	Zellerbach Paper Company
Pittsburgh, Pa.	The Alling & Cory Company
Portland, Maine	C. M. Rice Paper Company
Portland, Ore.	Zellerbach Paper Company
Providence, R. I.	Narragansett Paper Co., Inc. Carter, Rice & Company Corp. Storrs & Bement Company
Reno, Nev.	Zellerbach Paper Company
Richmond, Va.	B. W. Wilson Paper Company Virginia Paper Company, Inc.
Rochester, N. Y.	The Alling & Cory Company
Sacramento, Cal.	Zellerbach Paper Company
St. Louis, Mo.	Beacon Paper Company Tobey Fine Papers, Inc.
St. Paul, Minn.	The John Leslie Paper Company Newhouse Paper Company
Salt Lake City, Utah	Zellerbach Paper Company
San Antonio, Texas	Shiner-Sien Paper Company, Inc.
San Diego, Cal.	Zellerbach Paper Company
San Francisco, Cal.	Zellerbach Paper Company
San Jose, Cal.	Zellerbach Paper Company
Seattle, Wash.	Zellerbach Paper Company
Shreveport, La.	Louisiana Paper Company, Ltd.
Spokane, Wash.	Zellerbach Paper Company
Springfield, Mass.	The Paper House of New England Bulkley, Dunton & Company
Stockton, Cal.	Zellerbach Paper Company
Syracuse, N. Y.	The Alling & Cory Company
Tacoma, Wash.	Zellerbach Paper Company
Toledo, Ohio	The Commerce Paper Company
Trenton, N. J.	Henry Lindenmeyr & Sons
Troy, N. Y.	Troy Paper Corporation
Tulsa, Okla.	Tulsa Paper Company
Waco, Texas	Olmsted-Kirk Company
Washington, D. C.	Stanford Paper Company
Wichita, Kan.	Western Newspaper Union

EXPORT AND FOREIGN

New York City (Export)	National Paper & Type Co. *40 cities in Latin America and West Indies.*
New York City (Export)	Moller and Rothe, Inc. *20 countries in Latin America and West Indies.*
New York City (Export)	Mullet & Phipps (Asia) Ltd. *Belgian Congo, Burma, Ceylon, China, Hong Kong, Iceland, India, Malaya, Philippine Islands, South Africa.*
Australia	B. J. Ball Limited
New Zealand	B. J. Ball (N. Z.), Ltd.
Hawaiian Islands	Honolulu Paper Co., Ltd.

Agents for Zellerbach Paper Company

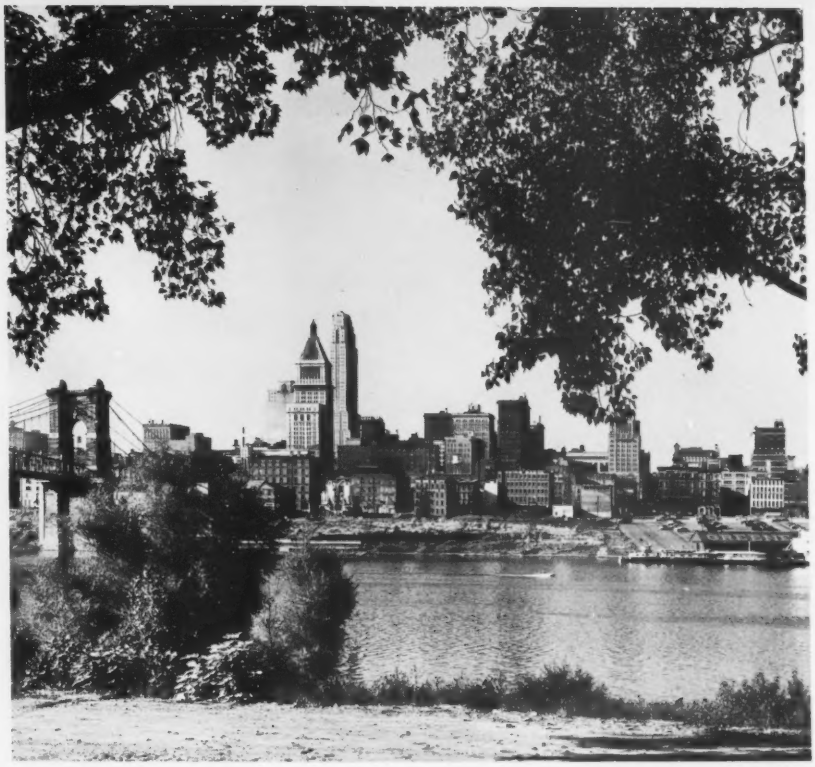


Photo by Louis C. Williams

WARREN'S

Lithographic Papers

Lusterkote · Offset Enamel · Overprint Label C1S · Sebago Label C1S
Fotolith Enamel · Silkote Offset

Warren's Lusterkote Cover provides a mirror-like glossy surface that contributes brilliance to the highlights and colors in lithographic reproduction. Now available with the lustrous finish on both sides of the paper.

Warren's Offset Enamel is a double coated paper for the printing of pictures by offset lithography. Double coating improves printability and uniformity, resulting in a higher potential of lithographic reproduction. Offset Enamel is available in glossy finish, Saxony finish, and dull finish. Also available coated one side only.

Warren's Overprint Label is double coated on one side and is eminently suitable for labels produced by offset lithography or by letterpress. This paper is pre-conditioned by an exclusive process.

Warren's Silkote Offset has the appearance of a wove offset but has a unique pigmented surface that gives more brilliant reproduction. It also offers a high degree of dimensional stability. Silkote Offset is available in Wove and Saxony finish.

Warren's Fotolith Enamel is a new quality of machine coated two side paper for the reproduction of halftones by offset lithography.

Warren's Sebago Label C1S is a new quality of machine coated label paper for offset lithography or letterpress.

Write for free booklet—"How Will It Print by Offset"

S. D. WARREN COMPANY · BOSTON 1, MASS.

[BETTER PAPER Warren's (STANDARD) BETTER PRINTING]
Printing Papers

4 color offset reproduction

WARREN'S

Lithographic Papers

Lusterkote • Offset Enamel • Overprint Label C1S • Sebago Label C1S

Fotolith Enamel • Silkote Offset

Technical
SECTION

Measurement of Dot Area and Sharpness

By D. J. Howe and J. A. C. Yule

Research Laboratories, Eastman Kodak Co.

ABSTRACT: A measurement of percent dot area of a halftone negative is important in the study of tone reproduction in the printing process. Previous methods have been laborious or inaccurate.

The measured area of a dot depends upon what part of the dot is selected as the dot boundary. When a printing plate is made from a halftone negative, the dot boundary is a fixed density such that all parts of the dot above this density do not print and all parts of the dot below this density do print. This density is equal to that of the first step of the sensitivity guide which prints on the press sheet.

An instrument has been constructed which scans many dots and measures the average percent dot area at a given density. Measurement of dot areas at several densities may be used as an indication of dot sharpness.

The area of a dot examined visually may be different from its printing density. A boundary definition corresponding to the visual boundary of a dot may be established and "visual dot" area measured directly.

AT the 1953 TAGA meeting, Franklin R. Clapper presented a paper entitled "Factors Affecting Tone Reproduction with Contact Screens."[1] The data were presented in terms of percent dot area of the negatives, positives and printed reproduction. Following presentation of the paper, the question was asked, "How did you measure the dot area in these experiments?"

The present paper is a discussion of some of the methods of measuring dot area, including a new instrument which we have developed for this purpose.

First, why do we use dot area? Most printing processes can print either a solid ink density or no ink. To produce intermediate tones, the printed area must be broken up into a pattern of solid black dots and clear white paper. The reflectance of the printed area is determined primarily by what fraction of the area is covered with ink. Other factors, such as the limited maximum density of the ink and complex internal reflections within the paper, modify this simple relationship, but all computations of the true reflectance of a printed area begin with the fractional area covered by the ink. Because dot area is basic to the mechanics of the halftone process, dot area is an obvious choice as a unit of measurement in the various steps of producing a printed reproduction.

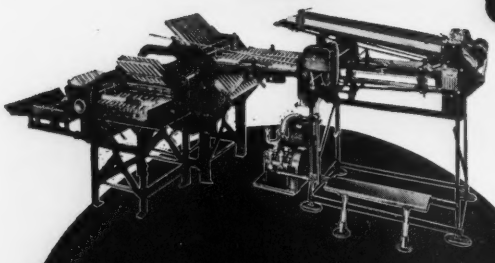
Other Reasons

There are other reasons for measuring dot area. Densitometers are coming into use in the graphic arts, and we have encouraged their use as control instruments. Optical density is not, however, a satisfactory measurement for halftone negatives. The characteristics of most photographic materials are plotted in terms of optical density and the logarithm of the exposure. This is well suited to the photographic process because the human eye and most photographic materials have a response which is essentially logarithmic. The steps in the halftone process depend upon the reproduction of areas rather than densities, so that the tones do not depend upon the exact nature of the response of the photosensitive materials. For example, if a halftone positive is made by contact-printing a halftone negative, the black-and-white dot areas are interchanged. This is a simple linear relationship and logarithmic measurements merely complicate the process.

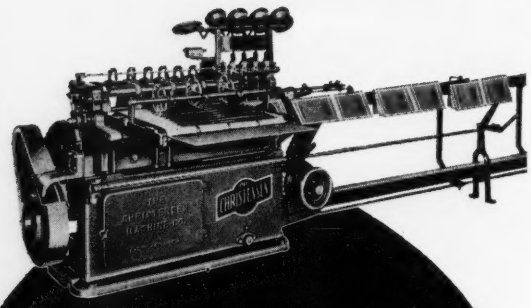
To illustrate the difference between continuous-tone and halftone photography, let us consider two reproductions of a photograph, one printed from a continuous-tone negative on a photographic paper and one printed from a halftone negative by litho-

DEXTER

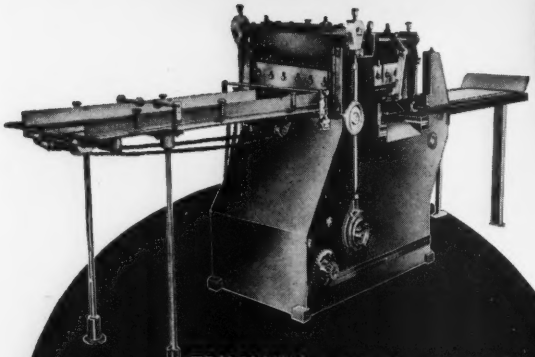
Folding, Stitching, Trimming... for a Profit!



FOLDING is the first step in achieving profits from pamphlets . . . and Cleveland Folders, available in a wide range of sizes, are the standard of the industry. Precision-built, of top quality materials and workmanship, every Cleveland is designed for many years of high-quality, high-speed production.



GATHERING & STITCHING of folded signatures is the next step to bindery profits. The Christensen Gang Stitcher, in the model best suited to your needs, will gather and saddle stitch as fast as operators can feed it . . . up to 7500 books or gangs per hour with McCain Automatic Feeders . . . with unvarying accuracy and reliability.



TRIMMING with the McCain Automatic 3-knife Trimmer not only increases profits but saves floor space and handling expense. Untrimmed books from the Christensen Gang Stitcher are automatically conveyed to the McCain Trimmer where 3 sides are trimmed, and finished books delivered ready for wrapping or packing. Books can be trimmed at speeds up to 7500 per hour. Attachments are available for cutting apart books stitched two-up or with bleed trim.

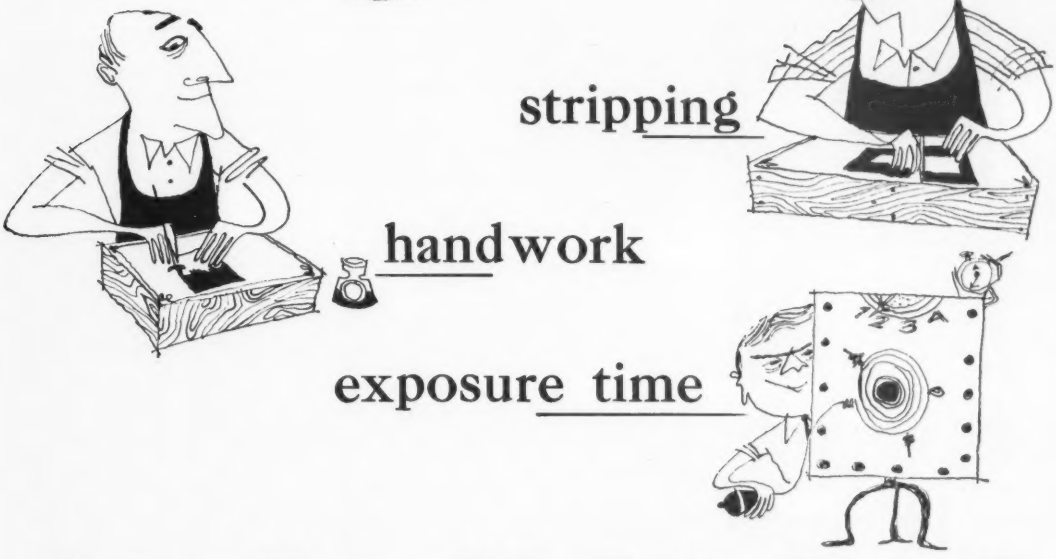
ILLUSTRATED CIRCULARS ARE AVAILABLE FOR ANY OF THE ABOVE MACHINES

DEXTER FOLDER COMPANY

General Sales Office

330 West 42nd Street New York 36, N. Y.

Save On



Ansco Reprolith Ortho Type B Thin Base Film

The low-shrink safety base (only .0035″) of this Ansco Film makes it ideal for lateral reversals, strip-ins and overlays.

The full orthochromatic sensitivity of Reprolith Ortho Type B Thin Base allows you to use filters to improve the rendition of colored copy and save costly hand work on negatives.

Its high speed reduces exposure times to the minimum, saving precious moments during rush jobs and giving you a more efficient shop.

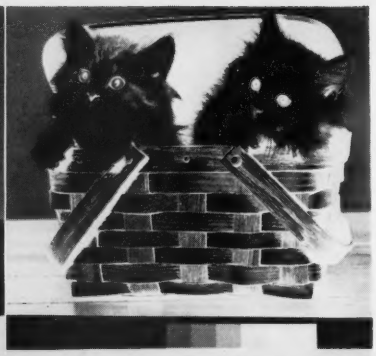
Make sure your shop gets the benefit of these advantages. Buy a good supply of Ansco Reprolith Ortho Type B Thin Base Film now! For best results, develop in Ansco Reprodol Developer.

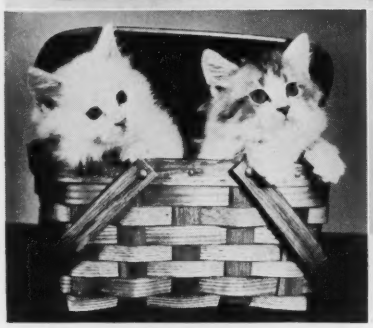
Ansco

Binghamton, New York

A Division of General Aniline & Film Corporation. "*From Research to Reality.*"

Figure 1





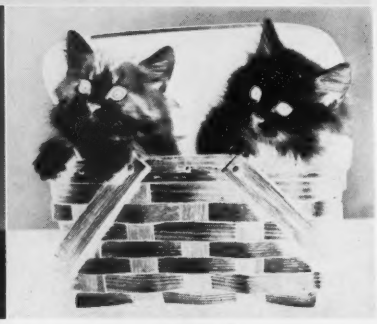


Figure 2

graphy.* The two reproductions look nearly identical (Fig. 1). The two negatives are quite different* (Fig. 2). The continuous-tone negative appears to be of nearly uniform contrast throughout the scale, whereas the halftone negative has very flat shadows and very constant highlights. If the tone-reproduction curves of the two negatives are plotted in the conventional manner, they appear as in Fig. 3. Significant differences in the shadows of the halftone

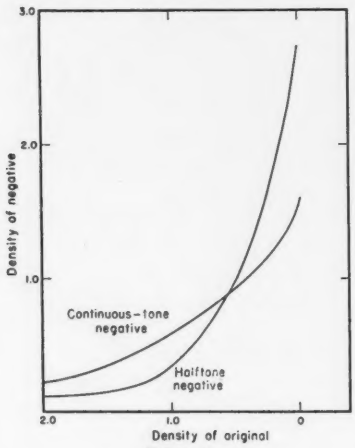


Figure 3

* It was, of course, necessary to use a halftone process for these illustrations, but they should represent the visual appearance of the actual originals fairly well.

negative are lost, while the highlights are exaggerated. This is avoided by plotting the dot area instead of the density of the halftone negative, as in Fig. 4. Taking into account the char-

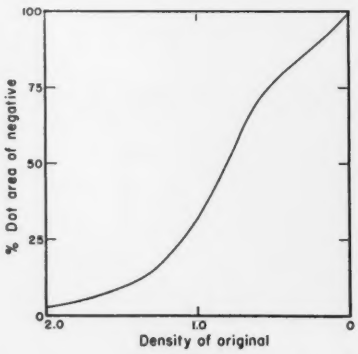


Figure 4

acteristics of the lithographic process, the ideal halftone negative approximates a straight line when plotted in this manner. This particular negative is somewhat lacking in shadow contrast.

There is a further advantage in this method of plotting halftone negatives. In making a lithographic plate from a halftone negative, a 10 per cent dot becomes a 90 per cent dot, and a 90 per cent dot becomes a 10 per cent dot. If the negative is plotted in terms of dot area, this result may be obtained by inverting the curve. If dot-area measurements on the plate do not match this curve, a tone-reproduction error has occurred in the platemaking process. By choosing a method of measurement and plotting suited to the response of the process, deviations from the idea are more easily determined.

The cameraman is remarkably accurate in his judgment of halftone negatives. Undoubtedly, part of his success can be attributed to his judgment of negatives in terms of dot area. However, a visual measurement of dots is not accurate enough for research purposes and, more important, the size of the dot that the cameraman sees may not be the size that prints.

What Is Dot Area?

What is the area of a dot? The halftone dot is a reproduction of the light distribution behind a ruled screen or a contact screen. The halftone negative material is of very high contrast so that the reproduction of the screen dot has much sharper sides than the screen dot itself. Fig. 5

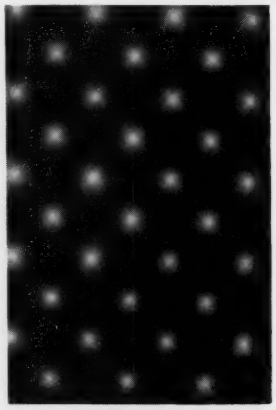


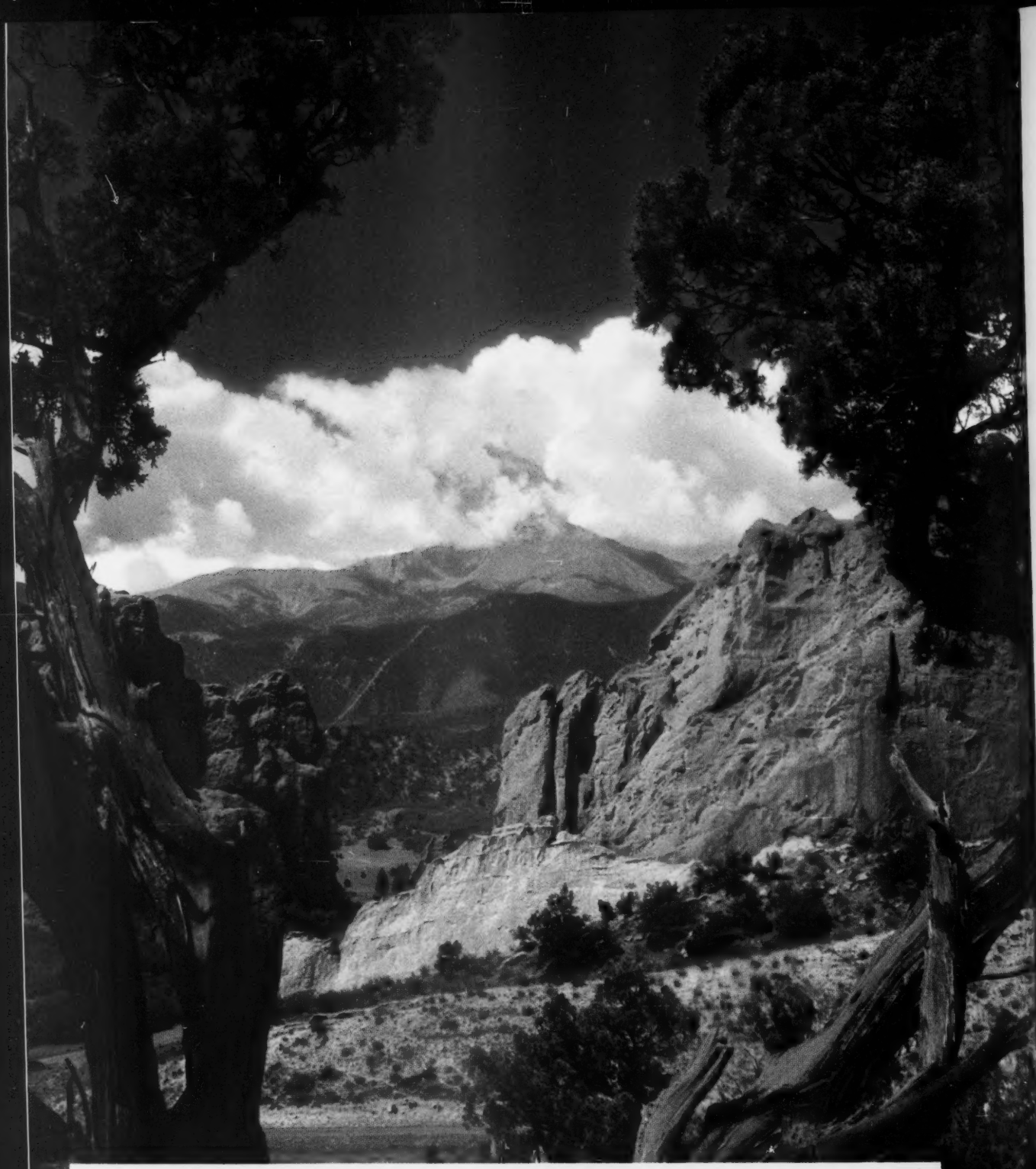
Figure 5

shows a greatly enlarged Kodak Magenta Contact Screen. Fig. 6 shows some halftone dots made through this screen. The important point to note is that the dot still has gradation. If density across the dot is measured with a microdensitometer, a section of the dot can be represented by plotting density against distance across the dot, as shown in Fig. 7. Obviously, there is some difficulty in deciding exactly where the edge of such a dot lies. One way out of this difficulty is to specify a definite den-

More business is done on Hammermill Bond than on any other watermarked bond. Business leaders everywhere prefer its clearer typing, cleaner printing, superior looks. Follow the leaders with the leader: Hammermill Bond. Hammermill Paper Company, Erie, Pennsylvania.

...yet HAMMERMILL BOND costs no more

—and actually less than many other watermarked papers



Peak of Faithful Reproduction . . .

is the usual result with printers who use Hammermill Offset. This paper is whiter, brighter, more opaque. Excellent for ink receptivity, dimensional stability, quick drying, freedom from fuzz and lint. Get it in Wove, Handmade, Homespun, Laurel or Linen —in a wide choice of substance weights and sheet sizes.

HAMMERMILL OFFSET for the finest color printing

Manufactured by

Hammermill Paper Company · Erie, Pennsylvania

Printed on Wove finish, Substance 70, Hammermill Offset

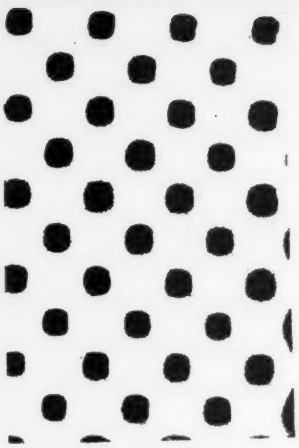


Figure 6

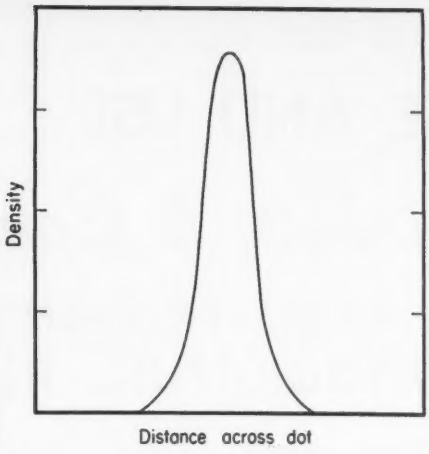


Figure 7

sity level at which the position of the edge is to be measured.

If this dot is exposed on a printing plate, the dot is again sharpened, because printing plates have a high contrast. If a sensitivity guide is used, that is to say, a continuous-tone step wedge exposed on the plate at the same time, it will indicate how much of the fringe of the dot will be printed through. We might notice that the plate prints when exposed through a density of 1.1. A dot will then print black wherever its density is less than about 1.0 and will not print when its density is greater than 1.0. The dot area of a halftone negative can now be defined as that part of the dot lying within a boundary of constant density (in this case 1.0), this boundary density being equal to the density of the first step of the sensitivity guide which prints.

When a cameraman looks at a dot, the edge of the dot that he sees is probably not a boundary of constant density but more likely an edge determined by the gradient of the dot. We are not sure what he sees as the edge of the dot, but experience indicates that it is not the same edge that determines the size of the dot when a printing plate is made. Many cameramen examine the dot by indirect light from an illuminator, the so-called "dark-field" illumination. The low-density fringe appears brightly illuminated by scattering, while the higher densities remain dark. The visual size of the dot is a much closr approximation to the printing dot size when viewed in this manner.

A comparison microscope is a useful tool for comparing dot sizes. The cameraman probably compares his negative dot with dots he remembers from past experience. The visual method becomes much more accurate if standard dots of known printing dot area are visible alongside the negative dots. Although the dots may not be seen as a printing plate "sees" them, they are compared with dots whose printing characteristics are known. This method does not work well if the characteristics of the dots being measured are different from the standard dots. For instance, you cannot compare veiled-over highlight dots with sharp standard dots.

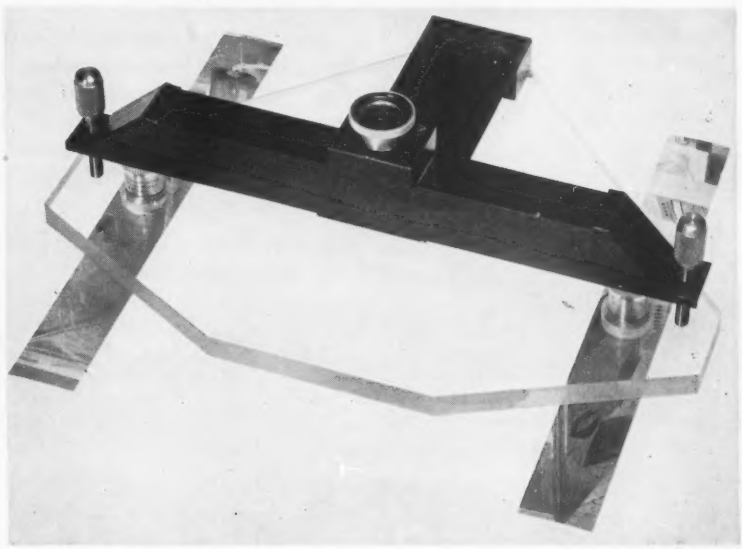
Fig. 8 shows a simple comparison microscope which we constructed for this purpose. It is designed to be used on an illuminator, and since it rests upon the negative, the film size is not limited as it would be on a conventional microscope stage.

The simplest and most direct method of measuring the dot area of a halftone negative is to make a contact positive from it. Instead of printing onto a printing plate, a high-contrast photographic film is used. The edges of the dots are sharpened sufficiently so that a densitometer reading will give a reasonably accurate measure of the size of the clear dots. If a sensitivity guide is used when making the positive, the exposure can be adjusted to duplicate the normal plate exposure so that the dot-boundary density chosen is the same as that used in making the printing plate.

Unfortunately, there are development effects in photographic emulsions which tend to change the size of the dots, and have no relation to the distortion of dot size which takes place in making a printing plate. These effects are more serious for small dots and therefore affect the highlights and shadows more than the middletones, and finer rulings more than coarse rulings.

The effect of agitation during de-

Fig. 8. Simple comparison microscope for halftone dot analysis.



CHOOSE AND USE

Sinclair & Carroll

PRESS-PROVEN LITHOGRAPHIC INKS

Inks that have proven their worth in the pressrooms of leading lithographers. To make this book practical and useful we have limited it to the most widely used shades, lithographed on both coated and offset paper stocks. Variations will be supplied on request.

Write for your copy of the latest S & C offset specimen book.

Sinclair & Carroll Co., Inc.

591 — 11th Ave.
New York 36, N. Y.

440 W. Superior St.
Chicago 10, Ill.

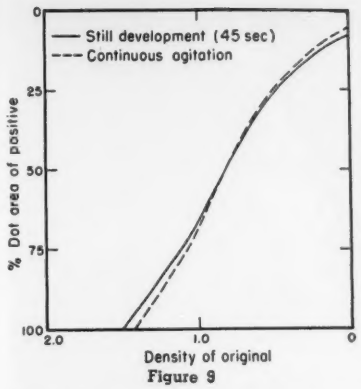


Figure 9

velopment of the positive is shown in Fig. 9. This effect may be utilized to minimize the errors in dot size. The optimum processing conditions may be determined experimentally by comparing a contact positive having sharp dots with contact negatives made from this positive, using various amounts of still development. Both the negative and the positive have sharp dots so that the dot areas on the two may be compared by means of density measurements, and the processing conditions which minimize the dot-area errors determined. This method of dot-area measurement is quite reproducible and, because it requires a minimum of equipment, it is widely used.

For research purposes, photomicrographs of dots can be made and constant density boundaries determined. The area can then be measured by means of a planimeter or by tracing on squared paper. However, many dots must be measured to ensure accuracy, and the method becomes very laborious if many dots are to be obtained.

Perhaps the most accurate methods of determining dot area are those which use actual density measurements of dots in the negative.

Before developing the instrument which is to be described in this paper, we devised a simple method for measuring dot density without the use of a microdensitometer. This is based on the familiar moiré pattern formed when one halftone negative is placed over another of the same screen ruling. A greatly enlarged dot pattern is visible (Fig. 10) at some angle of rotation, and if one of the negatives is a uniform halftone tint consisting of very small clear openings in a very dense black background, the enlarged dot pattern that is seen is an accurate representation of the dots in the negative.

If the dots in the tint and in the negative are in exact register, then similar portions of each dot are behind each hole in the tint and a uniform field is seen. If the tint is rotated slightly, at some point one of the holes in the tint will be directly over the center of a dot in the negative. The next hole and dot will be slightly out of register, however, and a point slightly displaced from the center of the dot will be viewed. Each succeeding dot and hole will be further displaced, in a regular progression. The enlarged dot that is seen is formed of the total of these individual points on each dot, as shown in Fig. 10. Density readings may be made quite easily on this enlarged dot pattern, using an aperture which will include only a few dots on the tint. If this aperture is 1/8 inch in diameter and the enlarged dot pattern is one inch, the result is equivalent to density measurements made on a single dot with an aperture one eighth the size of the dot.

This paper was presented at the sixth annual technical meeting of the Technical Association of the Graphic Arts, May 10-12, 1954.

Construction Points

There are two points that should be mentioned regarding construction of such an instrument. First, the tint and the negative should be held in vacuum contact to prevent relative motion while measurements are being made. Second, a tint with very small openings has a high integrated density by itself, which must be subtracted from the dot density. If a 95 percent tint is used, it will have a density of 1.30, and the densitometer must be sensitive enough to read 1.30 higher than the highest density which is to be measured. At the time this instrument was constructed, a barrier-layer photocell was used and sensitivity was limited so that a more open tint than was desirable had to be used. Modern electronic densitometers have eliminated this disadvantage so that quite accurate measurements are possible by this method.

This method is best suited for measurement of the maximum and minimum densities of the dot. It has been found particularly useful for measuring the maximum and minimum densities of the dots in a contact screen. Dot-area measurement is very laborious by this method because very many density measurements must be made to determine the boundaries of the dot. However, because the large moiré dot is the average of many dots, only one need be measured rather than many dots, as in the photomicrographic method.

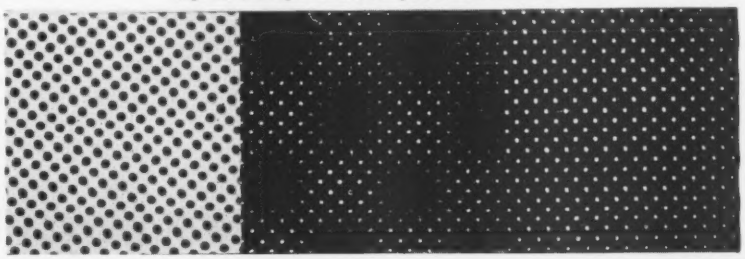
The advantages and disadvantages of the various methods of dot measurment which have been described may be summarized as follows:

1. Integrated density* measurements of halftone negatives are inaccurate because of unsharp and veiled-over dots and because small differences in shadow dot size are not detectable by this method.

2. Visual examination with a magnifier or microscope requires extereme skill, and even with dark-field illumination, the area seen may not correspond

* "Integrated density" is not the average density of an area but the density corresponding to the average transmittance or reflectance of the area.

Fig. 10. Principle of moiré—pattern densitometer



THE OFFSET PLATEMAKER
PAPER
is the base of his job
The Offset Platemaker prepares, exposes, inks and develops the plate.
NEW TICONDEROGA OFFSET
—for fine performance in 4-color process and monotone. This new brilliant white offset paper with its smooth, fuzz-free, sized surface combines good ink affinity and distinctive appearance with economy on long runs.
International Paper COMPANY
FINE PAPER AND BLEACHED BOARD DIVISION
220 East 42nd Street, New York 17, N. Y.

exactly to the effective printing area of the dot.

3. A comparison microscope with a set of standard dots may improve accuracy but is unsatisfactory for dots of different quality.

4. Measurement of dot area on a photomicrograph is much too laborious.

5. Density measurement of a high-contrast photographic print is fairly accurate, but because of the additional photographic step it is too time-consuming for many purposes.

6. The moiré-pattern densitometer is convenient for measuring dot density but not dot area.

It is apparent that none of these methods is completely satisfactory. It would be desirable to have an instrument which would directly measure percent dot area averaged over many dots in a period of time comparable to an ordinary density measurement on continuous-tone materials. We have constructed an instrument which we believe overcomes most of the difficulties of dot-area measurement.

Illustration

To illustrate the principle of this instrument, imagine a pattern of a few greatly enlarged halftone dots appearing on a television screen. The image is formed by a scanning spot which moves at constant velocity in a series of parrallel lines which cover the whole field of the picture. The scanning spot is sometimes within a dot, sometimes in the fringe of a dot, and sometimes outside of a dot. Because of the constant velocity of the scanning spot, the fraction of the total time the spot is within the dot will be equal to the fractional dot area. Imagine now that the contrast control of the television set is advanced until the picture consists only of black-and-white areas. The electrical signal which controls the brightness of the spot has been limited or "clipped" in the amplifying circuits and the portion remaining represents only a small range of density in the original dots. All shadow detail and all highlight detail are lost, and a very small range of intermediate tones are reproduced with very high contrast. The dots on the screen now have sharp edges and the fringe has been eliminated by the limiting action. If the amplfying and the limiting action are great enough, the dots on the screen will represent the area of the dots at some constant density level, and because the dot boundary is now accurately defined, the time that the spot is within the dot may be measured by summing the electrical signals which represent the black portion of the image.

This simple analogy illustrates the principle but not the method used in our instrument. Because of the size and comparative sharpness of halftone dots, measurement of their contours requires the techniques of microdensitometry. Microdensitometry is usually a slow process, primarily because of the slow response of the recording instruments ordinarily used. In 1953, however, W. R. J. Brown, of the Kodak Research Laboratories, presented a paper before the Society of Motion Picture and Television Engineers, (2) in which he described a simple, rapid-scanning microdensitometer which used a periodic optical scanning system, and he displayed the results on an oscilloscope screen. This instrument was capable of scanning a dot sixty times a second, but the scanning length covered only one or two halftone dots.

The rapid scanning made possible by the electronic circuit of this instrument was ideal for our purpose, but we wished to scan many dots rather than a repetitive scan of one or two dots. The linear scan mentioned in the television analogy is not desirable for several reasons. Because we were not concerned with forming an image but merely wished a meter reading representative of the average dot area over the whole field, a random scanning path could be used. If the scanning spot cut the dots at random, by the laws of probability the spot will be within the dot boundary a fraction of the time equal to the dot area, just as in the case of the linear scan. A rapid, repetitive, linear scan covering a few dots combined with a circular scan which slowly changes the location of the linear scanning path on the sample appears to satisfy the requirements.

Microdensitometer

The microdensitometer consists of a microscope which projects a small point of light directly on the halftone negative. The microscope objective is eccentrically mounted in a ring-type ball bearing and rotates at about one revolution per second to produce a circular scanning path of about ¼-inch diameter.

The linear scan is produced in the same manner as in the Brown instrument. A rotating glass plate in the optical system produces a repetitive lateral displacement of the scanning spot. Behind the negative is an end-on photomultiplier tube. The optical arrangement is very similar to that used in exposing a printing plate; that is, it has a specular light source and a flat, diffuse pickup surface behind the negative. Fig. 11 shows a diagram of

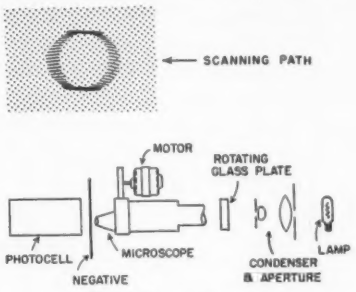


Figure 11

the optical system and the scanning path used. Fig. 12 shows a view of the microscope, the sample holder, and the phototube.

To determine when the scanning spot is within the dot boundary, a limiting technique exactly equivalent to the high-contrast television image is used. The microdensitometer signal is amplified and the top and bottom portions are removed by diode clipping circuits. Such a circuit is sometimes called a "slicing" circuit because it selects a slice of the signal. Fig. 13 illustrates the action of this operation. Only that portion of the signal representing the edge of the dot in the vicinty of the boundary density remains. The resulting square-wave signal is equivalent to the action of an electronic switch which is "on"

Baldwin Ink Agitators ...cut costs 4 ways!

① Assures uniform ink distribution for better results with less spoilage.

② Keeps ink on the job—makes it go further, without waste.

③ Saves time and effort needed for manual ink fountain attention.

④ Separate motor drive keeps ink in mill condition, whether press is running or not.

Applicable to almost any offset or letterpress ink fountain.

This is typical of the comments from hundreds of Baldwin users:

Christian Board of Publication
BEAUMONT AND PINE BLVD. — Box 179 — ST. LOUIS 3, MO.

Publishers for Disciples of Christ

February 28, 1955

William Gegenheimer Co., Inc.
80 Roebling Street
Brooklyn 11, New York

Attention Mr. Harold W. Gegenheimer

Dear Mr. Gegenheimer:

Thank you for calling at our plant to check on the Baldwin equipment purchased by us on September 30, 1953.

The Baldwin Ink Fountain Agitators are being used on our 65" two-color Mann Offset press, and we feel that they are unequaled for keeping the ink up against the fountain roller in order to guarantee a uniform flow of well stirred ink to the printing units.

Although, in the past, we have used agitators of another make, we now feel that the Baldwin is the tops.

Sincerely,

CHRISTIAN BOARD OF PUBLICATION

Albert E. Ilges

Albert E. Ilges

SIMPLE TO KEEP CLEAN

One screw is opened in seconds to remove the individual traveling cone for quick wash.

Sold on 30 day free trial basis. Get complete information by sending press make, model and size to:

William Gegenheimer Co., Inc.

80 Roebling Street • Brooklyn 11, New York

BALDWIN INK FOUNTAIN AGITATORS • BALDWIN VIBRATING ROLLERS
BALDWIN PRESS WASHERS • BALDWIN WATER STOPS • BALDWIN WATER FOUNTAIN LEVELS

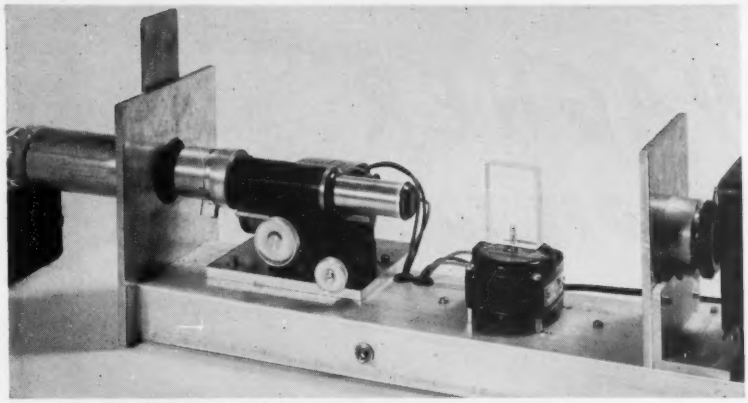


Figure 12. Microscope, sample holder and phototube

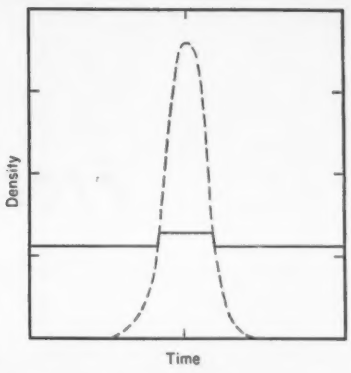


Figure 13

only when the scanning spot is within the dot boundary. If many dots are scanned, the sum of the "on" periods of the square waves will represent the time spent within the dots and will be proportional to the dot areas. This may be measured most easily by a meter with a long time constant which will read the average value of the square-wave signal, since the average is directly proportional to the sum in any given time interval. The meter may be suitably calibrated to read percent dot area directly.

A comparison of dot-area measurements made with this instrument with measurements made by film positives is shown in Fig. 14. The negative used

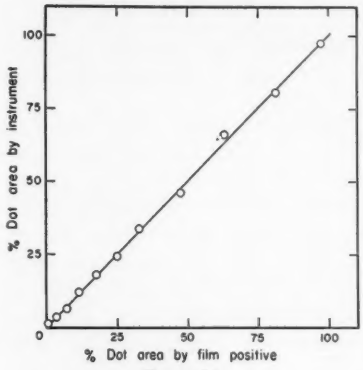


Figure 14

in this test was made on Kodalith Ortho Type 2 Film with a Kodak Magenta Contact Screen and a rose filter. It will be seen that the meter readings correspond closely to the measurements made from the film positive, which are believed to be reasonably accurate. At present, the instrument will only measure percent dot area at any selected boundary density of transmission samples such as contact screens, halftone negatives, and halftone positives. We are planning a reflection system which will allow dot-area measurement of press sheets and even of lithographic and photo-engraving printing plates.

Dot Sharpness

Measurement of dot sharpness can be accomplished by similar methods. A soft, unsharp dot with a low-density fringe is undesirable for two reasons. Visual judgment of dot size is influenced by unsharpness even when the dot is examined by dark field illumination, and the dot size on the printing plate will be dependent on plate sensitivity and exposure if the negative dots are unsharp.

Visual dot sharpness and printing dot sharpness do not appear to be directly related. Visual dot sharpness is greatly influenced by the dot density gradient at low densities whereas the printing dot sharpness is dependent upon the gradient at a higher density, since printing plate exposures are chosen to eliminate the fringe around the dot. Furthermore, visual dot sharpness appears to be related to dot diameter, while printing dot sharpness is related to dot area, and the two become quite different at the extremes of the halftone scale.

Printing dot sharpness may be evaluated by determining the change in dot area as the printing exposure is changed. Contact prints on film may be used for this measurement, using two different exposures chosen so that the dot boundary densities are somewhat above and below the boundary density used in platemaking. Fig. 15 illustrates the dot area of a halftone negative measured at a boundary density of 0.60 and 1.0. The displacement of the two curves is a measure of the unsharpness of the dots. The same measurement may be made on the dot-area instrument by measuring dot area at two density levels.

The characteristics of a contact screen may be evaluated in the same way. A contact screen is essentially a halftone tint with very unsharp dots. The tone-reproduction characteristcs of a screen depend upon the density distribution within the dot, which may be measured in terms of dot area at a series of density levels covering the

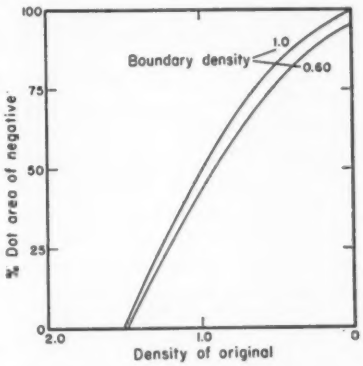


Figure 15

complete density range of the screen.

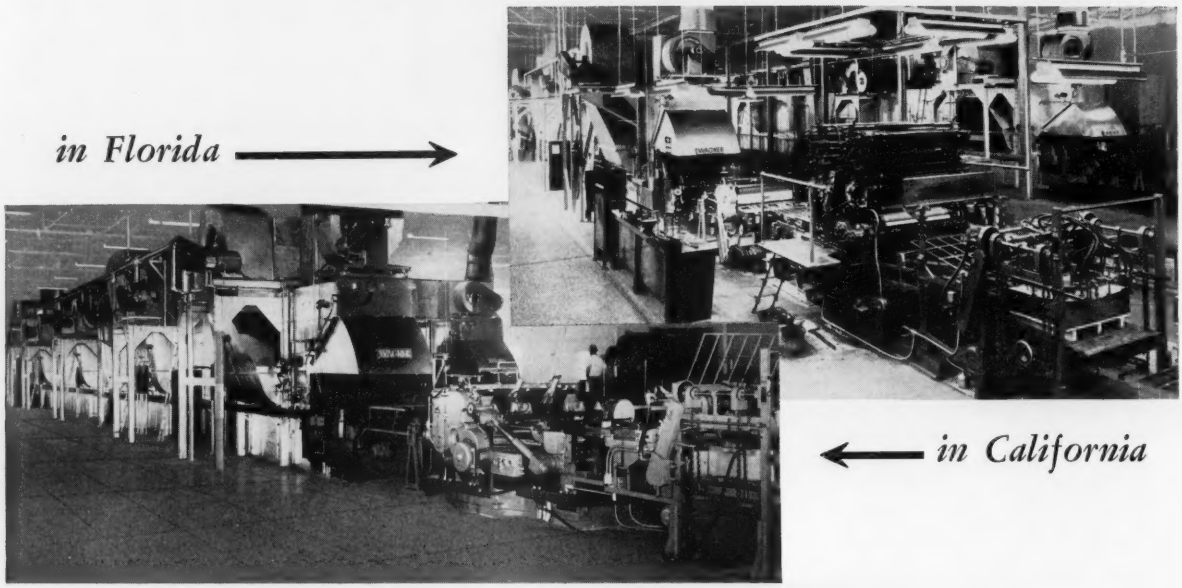
Visual dot sharpnesss or "dot quality" is important because it influences the cameraman's judgment.

It was mentioned previously that the visual edge of a dot is probably related to the gradient of the dot. There appear to be two possibilities. The visual edge of the dot may be the point of maximum gradient; that

(*Continued on Page* 145)

WAGNER
From Coast to Coast

in Florida ⟶



⟵ *in California*

Yes, from the Atlantic to the Pacific (and many intermediate points) complete lines of equipment have been installed by Wagner. Every detail and refinement has been carefully engineered — for speeds up to 100 sheets per minute.

Our experience of more than 50 years is available without obligation.

The Wagner line includes: ROTARY-AIR OVENS, D. E. F. OVENS, AUTOMATIC STRIPPERS, SPOT COATERS, VARNISHING MACHINES, AUTOMATIC FEEDERS, ROLLER REVOLVING MACHINES, LABORATORY COATERS, SYNCHRONIZING DRIVES, AND OTHER SPECIALIZED EQUIPMENT FOR COMPLETE LINES

WAGNER LITHO MACHINERY

Metal Decorating Machinery

Harborside Terminal, Unit 3, 34 Exchange Place, Jersey City, N. J.

NS NATIONAL-STANDARD Company — Division

Metal Decorating

Epoxy Coatings for Metal Decorating Finishes

By M. A. Glaser, E. J. Bromstead and G. L. Weaver

Midland Industrial Finishes Co.
Waukegan, Ill.

From a paper presented at the annual meeting of the National Metal Decorators Assn., Atlantic City, October, 1954.

WHEN epoxy resins first appeared on the American scene in 1946 and 1947, paint chemists concerned with metal decorating finishes immediately began to evaluate this new family of resins for possible use in the metal decorating field. They found that coatings made from these resins possessed outstanding adhesion, and good color retention on aging and baking.

It was at first difficult for chemists to believe that one class of resins could possess so many desirable properties, and the early published reports of the epoxy resins stimulated a great deal of research work designed to learn whether or not these new polymers could be adapted to the finishing requirements of the metal decorating industry.

In general, four classes of epoxy resin materials may be used in metal decorating. These are shown in the table.

Classes of Epoxy Materials Useful in Metal Decorating

1. *Heat-convertible coatings* — epoxies in conjunction with
   - A. Phenol-formaldehyde resin.
   - B. Urea or melamine-formaldehyde resins.
2. *Epoxy ester coatings*—by reaction of epoxies with fatty acids.
3. *Coatings catalytically cured* by the use of
   - A. Chemical amines like ethylene diamine and diethylene triamine.
   - B. Polyamide resins.
4. *Stabilizers for resins containing chlorine* such as
   - A. Vinyl chloride acetate copolymers and modified copolymers.
   - B. Vinylidine chloride polymers and copolymers.
   - C. Chlorinated rubber resins.

1. Heat-Convertible

The heat-convertible epoxy coatings are used principally for can and drum linings where a high order of product resistance, toughness and fairly good fabricating qualities are required. The most highly resistant coatings of the class contain an important proportion of phenolic resin, may contain a small amount of phosphoric acid as a curing catalyst and may also contain small amounts of other resins such as polyvinyl butyral or silicone to promote better flowing characteristics and freedom from "eye-holing" and "crawling." This type of coating is commonly used as a container lining. When properly applied and cured epoxy-phenolic linings are generally reported to have good resistance to acids (organic and inorganic), alcohols, alkalies, beverage concentrates, boiling water, flavor extracts, glycerol, higher ketones, hydrocarbons, non-ionic detergents, salt spray and sodium hypochlorite (5%).

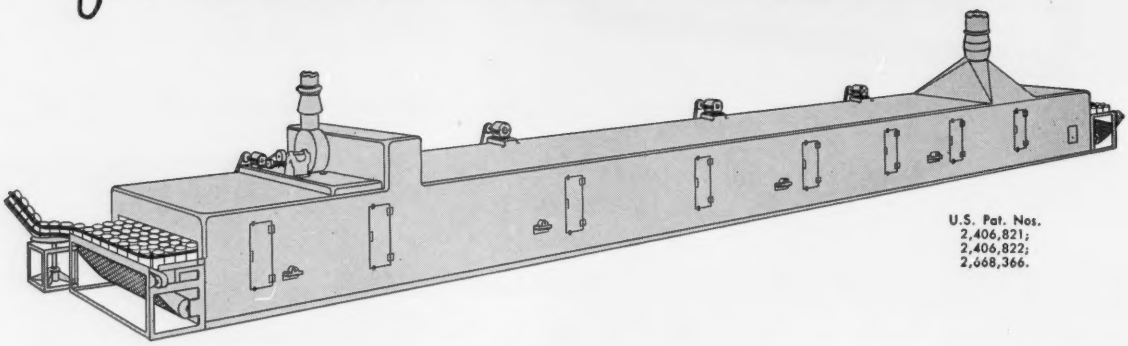
They are reported to have limited resistance to chlorinated hydrocarbons, hydrogen peroxide, lower ketones, some concentrated acids and some detergents.

Epoxy-phenolic surface coatings may normally be supplied at 30-40 percent N.V.M. and 20-40 sec. viscosity in the Ford #4 Cup at 77°F. Application usually is over tin plate, black plate, and heavier gage steel by spraying or roller coating. Adhe-

YOUNG BROTHERS OVENS

specially designed and engineered

for BAKING CAN BODIES



U.S. Pat. Nos. 2,406,821; 2,406,822; 2,668,366.

with these ideal advantages...

SPACE SAVING — Compact, streamlined design requires a minimum of floor space and ceiling height. Approximate overall oven dimensions — 70' long, 7' wide and 5'6" high. Oven may be mounted on the floor, suspended from ceiling or double decked. Easier to install . . . allows more free working space than conventional designs.

CLOSE TEMPERATURE CONTROL—Multiple heating zones designed to assure proper temperature distribution and meet rigid research department specifications for baking sanitary can linings. Oven is not sensitive to slight changes in louvre adjustment.

STREAMLINED APPEARANCE — Smooth, clean lines provide for easy housekeeping. No external air recirculating ducts or heaters are required. As a result, heat radiation losses are reduced to a minimum.

INCREASED PRODUCTION — Cans are brought up to required baking temperature in three minutes while oven is operating at a production rate of 450 cans per minute in 70' oven. Accommodates cans of various sizes. Other models also available — belt or cable conveyor.

EASILY ACCESSIBLE — Access doors on both sides of oven enable operator to place both hands on the cans all along the entire length of oven; also permits easy cleaning and maintenance if necessary. Supply and return ducts are likewise easily cleaned.

Additional cost savings are available to you at the very start with this exceptional oven. Write for further details which describe other advantages that may be just what you want for better, faster, more economical can baking today!

YOUNG BROTHERS COMPANY

1839 Columbus Road — Cleveland 13, Ohio

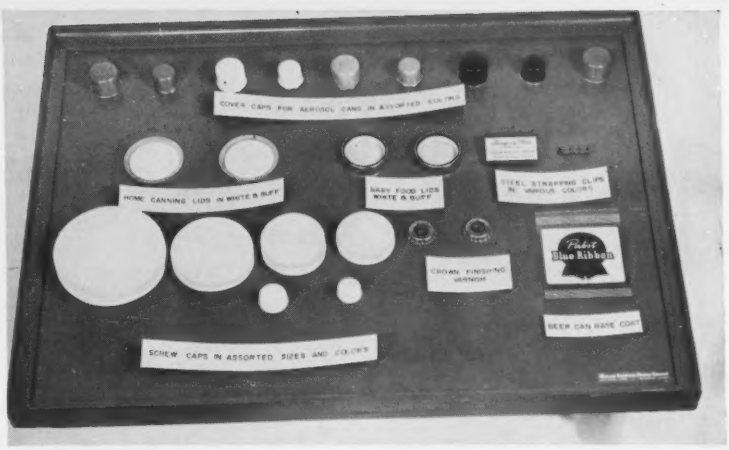
YBCo

Established 1896

sion over aluminum and zinc may or may not be adequate; and applications over these metals should be evaluated very carefully. Film weights required vary from 4-10 mgs./sq. in., depending on the end use. Specially blended solvents are required for thinning and clean-up operations. The baking schedule usually specified is 10 min. at 400-425°F. It is most important that these epoxy-phenolic coatings be thoroughly cured, as undercuring will cause a sharp drop in the resistance properties of the finish. Moderate overcuring, on the other hand, will cause little or no deterioration of the coating.

Where the ultimate in chemical resistance is desired, multiple coats may be used to insure obtaining an absolutely continuous film. In such applications, the baking schedule on all but the final coat should not exceed 10 min. at 300°F.; or adhesion and fabrication failures may occur because of poor inter-coat adhesion. Epoxy - phenolic coatings are generally sold as clear gold lacquers. Also they are sometimes marketed in pigmented form, too. Epoxy-phenolics may be roller coated, fabricated satisfactorily into pails, drums, and other containers not requiring severe drawing or forming operations. Epoxy-phenolics may be sprayed in those instances where fabrication and resistance requirements warrant this more costly application method.

The other group of heat-convertible epoxy coatings is based on combinations with urea- or melamine-formaldehyde resins. The hard, pale, flexible, abrasion resistant, and chemical resistant coatings of this group may be used as sanitary container linings, as the vehicle for collapsible tube enamels, and for such applications as metal shelf coatings, canister ends, etc., where extremely abrasion-resistant coatings are required. This group, the so-called epoxy-urea coatings, is not as highly resistant as the epoxy-phenolic group. The epoxy-urea compositions are, however, paler in color, less costly, and will usually bake out at lower schedules than will their epoxy - phenolic counterparts. The epoxy-ureas usually will fabricate satisfactorily into can bodies and ends, and into 28mm. and larger closures.


COVER CAPS FOR AEROSOL CANS IN ASSORTED SIZES
HOME CANNING LIDS IN WHITE & BUFF
BABY FOOD LIDS WHITE & BUFF
STEEL STRAPPING CLIPS IN VARIOUS COLORS
Blue Ribbon
CROWN FINISHING VARNISH
BEER CAN BASE COAT
SCREW CAPS IN ASSORTED SIZES AND COLORS

Some of the products finished with epoxy-ester roller coatings are shown in this photo. Some of the items are commercial large scale uses.

Epoxy-urea coatings may be supplied as pale, clear sanitary linings, gold sanitary linings or as pigmented coatings. The clear lacquers usually are available at 30-35 percent N.V.M. and 20-40 sec. viscosity in the Ford #4 Cup at 77°F. Application may be over tin plate, black plate or aluminum at film weights of 3-10 mgs./sq. in., depending upon the end use. Specially blended solvents are required for thinning and clean-up operations. Baking schedules employed are in the 10 min. at 375-400°F. range. Properly cured films of epoxy-urea coatings would be expected to possess the resistance properties to acids, boiling water, lipstick, mercurochrome, sodium hydroxide, tincture of iodine, vinegar, etc.

A major use of epoxy resins is in the reaction with vegetable oil fatty acids to form the well-known epoxy-ester class of vehicles. These vehicles may be compared broadly with the glyceryl phthalate or alkyd ester vehicles, so widely used for the finishes of the metal decorating industry. The epoxy-esters, however, have better flexibility and chemical resistance than their alkyd counterparts.

2. Epoxy-ester Coatings

Epoxy-ester finishes, both clear and pigmented, are increasingly winning their way into the coating departments of metal lithographers. Some of the properties which account for the increasing acceptance of these finishes in the metal decorating industry are excellent flow, hiding, color retention on exposure and overbakes, fabrication and deep drawing properties, "dry-heat" resistance, pasteurization resistance, process resistance and resistance to "threading" or "hairing" during fabrication.

In addition these finishes are good in drying properties, reducibility with low cost thinners and resistance to mild alkalies and other mild chemicals. They also have a low taste factor.

Despite the fact that the base box cost of these coatings is intermediate between that of the oleo-resinous and alkyd coatings on the low side — and the vinyl coatings on the high side, it would seem natural that the alert metal decorating industry would find many uses for epoxy-ester coatings because of this impressive list of superiorities. This is exactly what has happened, and what is occurring at an ever increasing tempo today. Epoxy-ester coatings are today being used or evaluated for such diverse applications as beer and soft drink cans, baby food vegetable cans, screw caps, aerosol caps, home canning lids, meat cans, etc. In the form of a process finishing varnish these coatings may be applied over wet or dry inks.

Although they probably come closer to being such a universally applicable coating than any other

(*Continued on Page* 157)

CHOOSE FROM THE SAFETY PAPER LINE

Preferred BY AMERICAN BUSINESS

Since 1871

LA MONTE SAFETY BOND ®
NATIONAL SAFETY PAPER ®
BANKERS SAFETY PAPER ®
SAFETY CHECK PAPER ®
ANCHOR SAFETY PAPER ®
EXCHANGE SAFETY PAPER ®
THE DESIGN IS THE SAME BOTH WAYS

La Monte Safety Bond . . . 100% RAG
National Safety Paper . . . 50% RAG
Bankers Safety Paper . . . . 50% RAG
Safety Check Paper . . . . . 25% RAG
Anchor Safety Paper . . . . . SULPHITE
Exchange Safety Paper . . . SULPHITE
Basketweave Exchange Safety Paper . . . SULPHITE

Safety Coupon Papers
Safety Ticket Papers *Safety Bristols*

Specially engineered Safety Papers for specific purposes

La Monte
SAFETY PAPER FOR CHECKS

GEORGE LA MONTE & SON · NUTLEY 10, NEW JERSEY
FOR DISTRIBUTORS SEE *THE PAPER CATALOG*

Technical BRIEFS

Abstracts of Current Literature in the Graphic Arts

These abstracts of important current articles, patents, and books are compiled as a service of the Lithographic Technical Foundation, Inc. They represent statements made by the authors and do not express the opinions of the abstractors or of the LTF.

Since some of the abstracts are from abstract journals, LTF cannot furnish photostats of all of the original articles. If the title is marked with an asterisk, LTF has no further information than that contained in the abstract itself. Inquiries about these items should be sent direct to the source that is named. If you want copies of U. S. Patents, write direct to the Commissioner of Patents, Washington 25, D. C. Send twenty-five cents for each patent desired. Make checks or money orders payable to "Treasurer of the U. S."

If the title of the abstract is not marked with an asterisk, LTF can supply photostats of the original article. The charge is sixty cents per page plus six cents postage. Orders from companies or individuals who are not members of LTF cannot be filled until payment is received. Orders with payment enclosed receive immediate attention.

Foreign patents may be obtained as photostats from the Library of Congress, Washington, D. C.

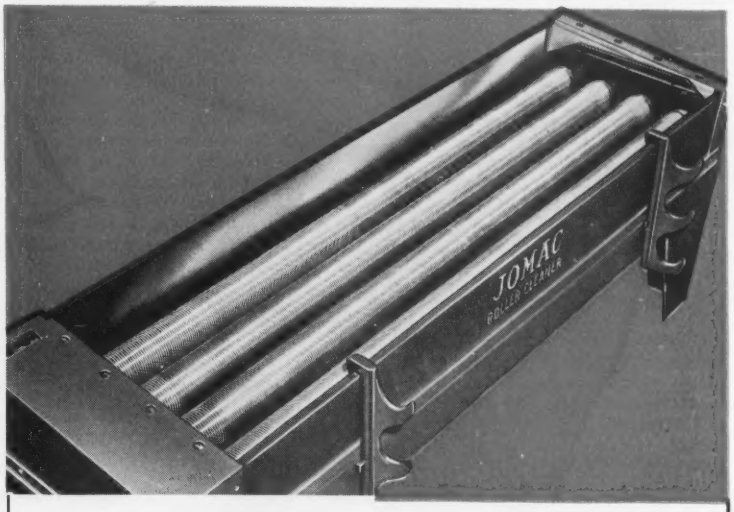
LTF also has mimeographed lists of (1) "Periodicals Abstracted by the Research Department" and (2) "Books of Interest to Lithographers." These are available for ten cents each in coin or U. S. stamps. Lithographic Technical Foundation, 1800 S. Prairie Ave., Chicago 16, Ill.

Photography, Tone and Color Correction

THE NEWER DEVELOPING AGENTS. T. T. Hill. *Photographic Engineering* 5, No. 4, 1954, pages 239-242 (4 pages). The discussion covers some of the general results from a preliminary study of some of the newer photographic developing agents which have been recently proposed for black and white processing. Three of these newer developing agents are Phenidone,* Triamol (Triaminophenol trihydrochloride) and Tetra Q (8 Hydroxy 1,2,3,4-tetrahydroquinoline). The discussion covers their general characteristics, the comparative results obtained, and a comparison with standard, older developing agents. (*Registered trademark of Ilford, Ltd.)

*PHOTOSENSITIVE RESIN. *U.S. Patent* 2,673,151. Gerhart. *Photographic Engineering* 5, No. 4, 1954, page 282. It has been discovered that copolymerizable mixtures of (a) polyesters of alpha-beta ethylenic, alpha-beta dicarboxylic acids and (b) ethylenically unsaturated compounds copolymerizable therewith can, by addition of certain sulfur compounds be readily sensitized to the action of light, in such manner as to permit the use of the materials for photographic reproduction. Exposure is prolonged under the action of the light at least until partial polymerization, e.g., a gel stage is reached. Images are produced usually in low relief upon the body of resin. There are no separate layers or media. The resin assumes a hardened thermoset state in which it is highly durable and insoluble and thus imparts great permanence to the reproduction.

SHORT CUTS IN OFFSET PLATEMAKING. *Inland Printer* 134, No. 5, February, 1955, pages 37-40 (4 pages); *Modern Lithography* 23, No. 2, February, 1955, pages 34-36, 113 and 115 (5 pages); from *LTF Research Progress* No. 33, available for thirty cents to members, one dollar to



Jomac Roller Cleaner pays for itself

Cleaner keeps presses running, frees pressmen from costly downtime delays

If Jomac Roller Cleaner never cleaned a dampener roller (a job it does with dispatch), it would still pay for itself in short order. Because by breaking in a complete set of rollers simultaneously, the cleaner saves 15 minutes running time per press. This economy alone can pay for the cleaner inside of a year.

Increases cover life 50%

In its primary job, the Jomac Roller Cleaner cuts downtime further, increases dampener cover life 50% by cleaning thoroughly without tearing covers or breaking stitches. The only labor involved is filling the tank with water, adding cleaning fluid, and switching on the motor. The rollers emerge clean, smooth, and, in the case of new rollers, free of lint.

Write for literature

Send for the latest literature on Jomac Roller Cleaner, and for a list of users in your area. Give us the overall length of your longest dampener, and we'll quote you the price of the proper size cleaner. Sizes from 36" to 96". Jomac Inc., Dept. L1, Philadelphia 38, Pa.

Use Jomac Seamol and Flanol seamless coverings for your dampener rollers

JOMAC *Inc.*

YOU CAN HAVE *Beauty* IN LITHOGRAPHY

with

LEWIS ROBERTS

PRECISION OFFSET INKS

"Beauty, but skin deep"—so said the poet, Philip James Bailey: in the language of the lithographer it's "Beauty, but film deep".

Use Lewis Roberts PRONTO precision offset inks and you will find they have the tinctorial strength which gives that thin film of color lasting beauty on the printed sheet. PRONTO offset inks are uniform in press performance and formulated to meet your particular needs.

Leading lithographers rely on this time-honored combination . . . Lewis Roberts product quality plus prompt and efficient service.

LEWIS ROBERTS, INC.

NEWARK 5, N.J.

BRANCHES AND DISTRIBUTORS
IN 20 CITIES

non-members from the Lithographic Technical Foundation, 131 East 39th Street, New York 16, N. Y. Reviews steps in platemaking that can be cut to reduce costs and those that can't, and gives instructions for making halftone vignettes.

WORKING WITH BI-METAL PLATES. *Modern Lithographer and Offset Printer* 51, No. 1, January, 1955, pages 21-23 (3 pages). A discussion of the two general types of bi-metal plates "deep-etch" (printing metal is the base) and "surface" (printing metal is plated). The author feels that a plate with a slight grain is advantageous from the press standpoint.

*METHOD AND APPARATUS FOR GRAINING LITHOGRAPHIC PLATES. *U.S. Patent* 2,669,810. E. G. Carlson and A. H. Eppler. *Official Gazette* 679, No. 4, February 23, 1954, page 853. 4. In a plate graining machine the combination with a rectilinear track and a carriage movable on said track, said carriage being provided with bearings, of a cylindrical drum mounted for rotation on an axis parallel to the track in the bearings, means at one position along the track for rotating said drum, a nozzle mounted proximate the track at said position for rectilinear traversing movement respecting the drum and means for traversing the nozzle, means of supplying to the nozzle fluid-borne abrasive, and means for forceably jetting said abrasive from the nozzle toward the drum.

*ETCHING. *British Patent* 689,338. Interchemical Corporation. *Abridgement of Specifications* XVI, 1955, pages 115-116. An etch for use in making lithographic printing plates which will dissolve chromium without attacking copper, and which has only a slow action on a light-hardened bichromated gum arabic film, consists of a concentrated aqueous solution of calcium or magnesium chloride, a minor proportion of a concentrated solution of a stannic or chromic salt, and a small amount of acid sufficient to reduce the pH to below 2.0. The stannic or chromic salt is preferably the chloride. The acid is present to the extent of about 2 liquid ounces per gallon of the calcium or magnesium chloride solution, and may be hydrochloric, nitric, sulphuric, acetic, phosphoric, lactic, hydroxyacetic, citric, oxalic or tartaric acid or resorcinol may be used. 3 examples are given. Patent Specification 640,655 is referred to.

Paper and Ink

VARNISH AND GUM ON PAPER DRIED IN FIVE SECONDS BY INFRA-RED HEATING. *Modern Lithographer and Offset Printer* 50, No. 12, December, 1954, page 25. Label sheets and book covers are dried with infra-red lamps after varnishing. Sheets 45 in. x 30 in. are dried in five to seven seconds at a rate of 1000 to 1800 an hour. This same efficiency is reported for drying water gum coatings.

*PRINTING INKS FOR POLYETHYLENE SURFACES. *German Patent* 898,906. Badische Anilin and Soda Fabrik and R. Buchwald. *Brit. Plast. Fed. Abstr.* 9, No. 11, November, 1954, page 1127; *Printing Abstracts* 10, No. 2, February, 1955, page 60. Polyethylene is dissolved in benezene, toluene or decahydronaphthalene and a stabilizer such as linseed oil varnish, an alkyd resin or polyisobutylene is added. The fine dispersion of polyethylene so obtained is cooled, blended with a pigment and used for printing on polyethylene. German patents may be obtained as photoprints from the U. S. Patent Office, Washington 25, D. C.

TIN PRINTING INK. *Paint Technology* 19, No. 209, February, 1955, page 58 (complete article appears here). A stoving ink for tin-printing contains 76 p. benzyl ether of dimethylol urea, 24 p. benzyl alcohol, 32 p. melamine hydrochloride, 25 p. long-oil modified alkyd, and 100 p. Prussian blue. The "drier" for this medium consists of 60 p. phthalic anhydride, 18 p. tricresyl phosphate, 6 p. rosin, 4 p. blanc fixe, 12 p. of a 5:95 solution of aluminum stearate in liquid paraffin, and 2 p. 6% cobalt linoleate. The amount of drier required is determined by reference to a graph similar to the one already referred to but drawn specifically for these particular constituents of medium and drier and for the stoving temperature envisaged. The latter may be relatively low (e.g., at 80°C., with 10% of drier added to the medium, setting time is 35 min.), but increased resistance to water, etc., is obtained by stoving for up to an hour at 150°C.

DEVELOPMENT AND USE OF THE LTF PICK TESTER. G. C. Wheeler. *TAPPI* 38, No. 2, February, 1955, pages 132-134A (3 pages); *Bulletin of the Institute of Paper Chemistry*, 25, No. 7, March, 1955, page 556. The author reviews previously published concepts, shows the correlation of LTF pick tester results to industrial experience, and discusses current work with a strain-gage technique to measure forces developed during the impression. 2 tables and 5 figures.

PAPER FROM NYLON. *Printing Monthly* 6, No. 12, March, 1955, page 6. Paper produced from nylon has several interesting properties. It is three to ten times as strong as paper made from rags or conventional pulp. Also, it is highly resistant to chemical attack, absorbs very little moisture, resists action of molds, bacteria, and light. Resistance to folding was up to 200 times better than regular rag or wood pulp paper. Suggested uses include heavy-duty bags, filtration and packaging of corrosive chemicals, maps, tracings, and documents.

*MACHINE COATED PAPERS. F. J. M. Wijnekus. *Allgemeine Papier-Rundschau* 1954, pages 1040-42; *Chemical Abstracts* 49, No. 3, February 10, 1955, Col. 2069. Difficulties encountered in offset printing are reviewed. A method is discussed that is used in determining the lower of surface tension of H_2O that has been brought into contact with machine-coated papers containing surface-active agents. These permit a more satisfactory moistening of the paper that is to be printed. The apparatus consists of a torsion balance, indicating in mg. the weight required to detach the edge of a thin glass platelet from the surface of H_2O (or aqueous solutions), and the results are given in dynes/cm. Various machine-coated papers were examined and marked differences in surface-tension lowering were noted and tabulated. Allgemeine Papier-Rundschau is published at Fürstenbergstrasse 175, Frankfurt a. M. 4, Germany.

*THE DUSTING OF PAPER. *Osterr. Papier-Ztg.* 60, 7, 1954, page 15 (in German); *Tech. Bull. Tech. Sect. Brit. Pap. Bd Mkrs' Ass.* 31, 6, December, 1954, pages 184-185; *Printing Abstracts* 10, No. 3, March, 1955, page 125. Dusting occurs principally with printings which are heavily loaded and particularly with machine-finished papers. Addition of a small amount of boiled starch to the beater pulp helps to hold the filler particles better in the paper structure. Similarly, sizing also mitigates fluffing. A highly glazed machine-finished paper or a supercalendered paper (the latter being appreciably moistened in calendering) has the filler compressed into the inner part of the sheet and the surface is therefore not so liable

Planographic Printing Processes

*ELEMENTS FOR PHOTO-LITHOGRAPHY. *British Patent* 694,224. Kodak, Ltd. *Abridgement of Specifications* XX, 1955, pages 232-233. Unsensitized elements for sensitization shortly before use, or which may be pre-sensitized and so stored, comprise a metal foil such as zinc or aluminum and a layer of cellulose organic ester, usually the fully esterified acetate, bonded together by an interlayer comprising a copolymer of vinyl chloride, vinyl acetate and an x:B ethylenically unsaturated dicarboxylic acid such as maleic or fumaric acid, the cellulose organic ester layer containing an anti-halation dye and having a hydrolysed stratum on the outer surface thereof, and the metal foil having its outer surface covered with a protective layer of the same copolymer. The protective layer may carry a further layer of dyed cellulose organic ester, which itself may have a hydrolysed outer stratum. In a modification the anti-halation dye may be contained in a layer of cellulose nitrate situated between the copolymer interlayer and the said cellulose organic ester layer. The cellulose organic ester layer may be provided by use of a performed sheet of this material or by solvent coating procedure, and the copolymer layer provides secure adhesion to the reinforcing metal foil, and protection of the latter from alkali used for surface hydrolysing the cellulose ester. The anti-halation dye is a blue and ultraviolet absorber. The hydrolysed cellulose ester stratum or both of them may be sensitized by the methods of Specifications 617,227, 678,321 or 678,323. Two examples are given.

*PHOTOMECHANICAL PROCESS AND LIGHT SENSITIVE DIAZOTYPE MATERIALS THEREFOR. *British Patent* 715,663. Kalle & Co. A.G. *Printing Abstracts* 9, No. 11, November, 1954, page 779. The light-sensi-

(*Continued on Page* 93)

CAPTURE THE COMPETITIVE ADVANTAGE WITH THE CONSOLIDATED "PEARL"

23 ROLLERS INSURE PERFECT INKING AND DAMPENING

48" FEEDER PILE

8,000 sheets per hour of quality printing

18¼" x 24¾"

HIGH SPEED LITHOGRAPHIC OFFSET PRESS

THE OFFSET PRESS WITH EVERY *COMPETITIVE* ADVANTAGE

The Consolidated Pearl Offset Press, with a production speed of 8,000 sheets an hour; the extremely high stock pile; the new electric eye photronic sheet control; the outstanding inking and dampening system with the new patented brush ductor dampener is your assurance of being competitive. Two out of three progressive plant owners who have had the opportunity to reap the benefits of their first installation of Consolidated Pearl Presses, have already placed repeat orders because they have the competitive advantage by producing as much as twice as many higher quality printed sheets per day.

See how easy it is to purchase a Pearl Offset Press on our Depreciation Payment Plan.

WRITE, WIRE OR PHONE TO ASSURE PROMPT DELIVERY.

COMING SOON . . . THE NEW CONSOLIDATED JEWEL 22" x 30" OFFSET PRESS

CONSOLIDATED *International Equipment and Supply Company*

GENERAL OFFICES AND PLANT:
1112 NORTH HOMAN AVENUE, CHICAGO 51, ILLINOIS

BRANCH OFFICES: 330 WEST 26th STREET, NEW YORK 1, NEW YORK; 1190 BENNINGTON STREET, EAST BOSTON 28, MASSACHUSETTS; 1220 MAPLE AVENUE, LOS ANGELES 15, CALIFORNIA

ILLUSTRATION COURTESY OF FISHER BODY DIVISION, GENERAL MOTORS CORPORATION

Green light for the demonstration

This year as never before the automotive industry has captured the public's imagination. Advanced engineering, bold design and a billion dollar investment all played a part in this dramatic achievement. So did Oxford papers by helping to bring the story to the American people in magazines, catalogs and other printed pieces. Ask your Oxford Merchant to show you some outstanding examples of creative printed material on Oxford papers.

Oxford Papers

Help Build Sales

This insert is a sample of the letterpress results you can get on

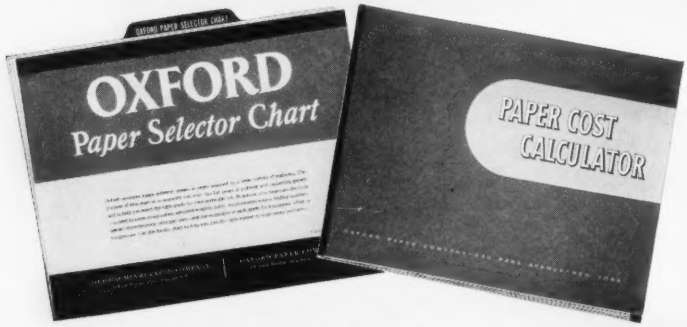
OXFORD

Mainefold Enamel

OXFORD PAPER COMPANY
RUMFORD, MAINE • WEST CARROLLTON, OHIO

This bright white enamel letterpress paper is coated on two sides, with a high polish, excellent surface smoothness and unusual ink affinity. It affords sharp, true detail in multicolor process and black and white halftone reproduction across the full range of tone values.

TWO VALUABLE AIDS



(1) The new OXFORD PAPER SELECTOR CHART is a time-saving master guide to the right grade for each purpose. (2) The new OXFORD PAPER COST CALCULATOR gives the exact cost per 1000 sheets for all common weights and sizes. Ask your nearby Oxford Merchant or write us direct.

Nation-wide Service Through Oxford Merchants

Albany, N. Y. . . . . W. H. Smith Paper Corp.
Asheville, N. C. . . . . Henley Paper Co.
Atlanta, Ga. . . . . Wyant & Sons Paper Co.
Augusta, Maine . . . . . Carter, Rice & Co. Corp.
Baltimore, Md. . . . . The Mudge Paper Co.
Bethlehem, Pa. . . Wilcox-Walter-Furlong Paper Co.
Boise, Idaho . . . . . Blake, Moffitt & Towne
Boston, Mass. . . . . Carter, Rice & Co. Corp.
Storrs & Bement Co.
Buffalo, N. Y. . . . . Franklin-Cowan Paper Co.
Charlotte, N. C. . . . . Caskie Paper Co., Inc.
Henley Paper Co.
Chattanooga, Tenn. . . . . Bond-Sanders Paper Co.
Chicago, Ill. . . . . Bermingham & Prosser Co.
Bradner, Smith & Co.
Marquette Paper Corporation
Midland Paper Company
The Whitaker Paper Co.
Cincinnati, Ohio . . . . . The Johnston Paper Co.
The Whitaker Paper Co.
Cleveland, Ohio . . . . . The Cleveland Paper Co.
Dayton, Ohio . . . . Cincinnati Cordage & Paper Co.
The Whitaker Paper Co.
Des Moines, Iowa . . . Bermingham & Prosser Co.
Detroit, Mich. . . . . Chope Stevens Paper Co.
Fresno, Calif. . . . . Blake, Moffitt & Towne
Gastonia, N. C. . . . . Henley Paper Co.
Hartford, Conn. . . . Green & Low Paper Co., Inc.
Storrs & Bement Co.
High Point, N. C. . . . . Henley Paper Co.
Indianapolis, Ind. . . . . MacCollum Paper Co.
Kalamazoo, Mich. . . . Bermingham & Prosser Co.
Kansas City, Mo. . . . . Bermingham & Prosser Co.
Knoxville, Tenn. . . . . Louisville Paper Co.
Lincoln, Neb. . . . . Western Newspaper Union
Little Rock, Ark. . . . . Roach Paper Co.
Long Beach, Calif. . . . . Blake, Moffitt & Towne
Los Angeles, Calif. . . . . Blake, Moffitt & Towne
Louisville, Ky. . . . . Louisville Paper Co.
Lynchburg, Va. . . . . Caskie Paper Co., Inc.
Manchester, N. H. . . . . C. H. Robinson Co.
Memphis, Tenn. . . . . Louisville Paper Co.
Milwaukee, Wis. . . . Allman-Christiansen Paper Co.
Sensenbrenner Paper Co.
Minneapolis, Minn. . . Wilcox-Mosher-Leffholm Co.
Nashville, Tenn. . . . . Bond-Sanders Paper Co.
Newark, N. J. . . . . Bulkley, Dunton & Co., Inc.
New Haven, Conn. . . . . Bulkley, Dunton & Co.
(Division of Carter, Rice & Co. Corp.)
Storrs & Bement Co.
New York, N. Y. . . . . Baldwin Paper Co., Inc.
Bulkley, Dunton & Co., Inc.
Green & Low Paper Co., Inc.
The Whitaker Paper Co.
Oakland, Calif. . . . . Blake, Moffitt & Towne
Omaha, Neb. . . . . Western Paper Co.
Philadelphia, Pa. . . . . Atlantic Paper Co.
Wilcox-Walter-Furlong Paper Co.
Phoenix, Ariz. . . . . Blake, Moffitt & Towne
Pittsburgh, Pa. . . . . General Paper Co.
Brubaker Paper Co.
Portland, Maine . . . . . C. H. Robinson Co.
Portland, Oregon . . . . . Blake, Moffitt & Towne
Providence, R. I. . . . . Carter, Rice & Co. Corp.
Richmond, Va. . . . . Cauthorne Paper Co.
Rochester, N. Y. . . . . Genesee Valley Paper Co.
Sacramento, Calif. . . . . Blake, Moffitt & Towne
St. Louis, Mo. . . . . Bermingham & Prosser Co.
Graham Paper Company
Shaughnessy-Kniep-Hawe Paper Co.
Tobey Fine Papers Co.
Salt Lake City, Utah . . . Western Newspaper Union
San Bernardino, Calif. . . . Blake, Moffitt & Towne
San Diego, Calif. . . . . Blake, Moffitt & Towne
San Francisco, Calif. . . . . Blake, Moffitt & Towne
San Jose, Calif. . . . . Blake, Moffitt & Towne
Seattle, Wash. . . . . Blake, Moffitt & Towne
Sioux City, Iowa . . . . Western Newspaper Union
South Bend, Ind. . . . . Bermingham & Prosser Co.
Spokane, Wash. . . . . Blake, Moffitt & Towne
Springfield, Mass. . . . . Bulkley, Dunton & Co.
(Division of Carter, Rice & Co. Corp.)
Mill Brand Papers
Paper House of New England
Stockton, Calif. . . . . Blake, Moffitt & Towne
Tacoma, Wash. . . . . Blake, Moffitt & Towne
Toledo, Ohio . . . . . Paper Merchants, Inc.
Tucson, Ariz. . . . . Blake, Moffitt & Towne
Washington, D. C. . . . John Floyd Paper Company
Worcester, Mass. . Esty Div. Carter, Rice & Co. Corp.
York, Pa. . . . . The Mudge Paper Co.

OXFORD PAPER COMPANY, *230 Park Avenue, New York 17, N. Y.* ★ OXFORD MIAMI PAPER COMPANY, *35 East Wacker Drive, Chicago 1, Ill.*

Mills at Rumford, Maine, and West Carrollton, Ohio

It costs no more to make a better impression

...when you run

CONSOLITH OPAQUE

...the coated offset at uncoated paper prices

Outstanding opacity, strength and bulk. Excellent color and brightness. Complete freedom from annoying "two-sidedness." These are just a few of the many important advantages of a fully *mineral-coated* offset that cost no more than top-grade uncoated offsets when you specify new CONSOLITH OPAQUE.

On CONSOLITH OPAQUE's fully coated matte-finish surface, you're sure of sharp, clean definition of halftones and solids in black-and-white and multicolor lithography, without mottle. Its outstanding dimensional stability provides smooth, trouble-free press performance. And its consistently uniform quality is regularly pre-tested on the press to assure meeting the most exacting lithographic requirements.

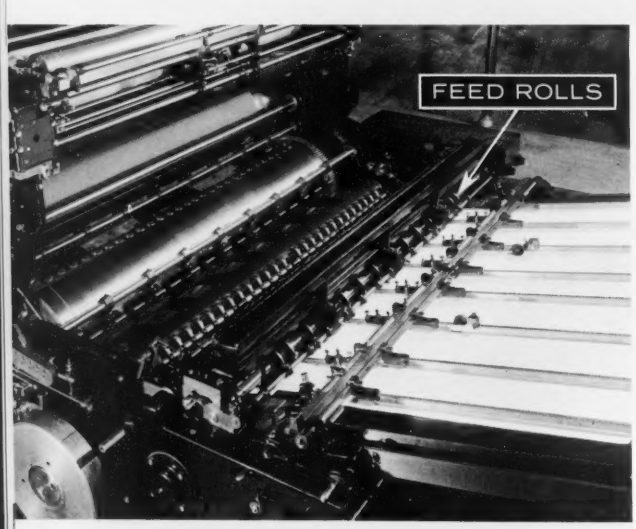
Only your Consolidated merchant has this remarkably new and different offset value. He'll be glad to provide free trial sheets for a test run. Compare it for cost, performance and results with both coated and uncoated papers. That's the best way to see why many leading shops have found a big competitive advantage in running new CONSOLITH OPAQUE.

Consolidated enamel printing papers

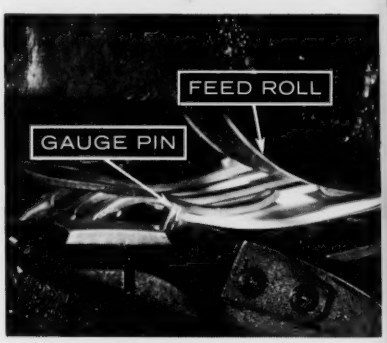
production gloss • modern gloss • flash gloss
productolith • consolith gloss • consolith opaque

CONSOLIDATED WATER POWER & PAPER CO. • Sales Offices: 135 S. La Salle St., Chicago 3, Ill.

Harris four-color offset press with ultra-precise feed-roll register



Harris feed rolls overfeed the sheet against gauge pins on the feed-in cylinder. To control register on the tail of the sheet, the pressman sets these gauge pins in an almost imperceptible concave arc. Feed rolls force the sheet's leading edge to conform to this arc, thus putting the tail under tension and compelling it to assume a controlled amount of fanning when sheet passes between cylinders. Since the gauge pins are readily adjustable, the pressman can set them to meet his exact requirements.



Overfeeding action of Harris feed rolls is shown in stroboscopic photos taken at 1/10,000 of a second. First photo shows leading edge of sheet touching the gauge pins, which have been graduated by the pressman to form a very slight concave arc.

The difference between profit and loss

can be only 1/240 of an inch

You make money in the printing business by a whisker. If you're off register by a fat whisker—say a full dot—most customers will call it a lousy job. And they won't be back for more.

Harris licked this problem long ago with feed rolls. They're the most precise system of register ever developed for sheet-fed presses. And they're a big reason why most of the money-making lithographers use Harrises.

How come Harris feed rolls are so good?

For one thing, they make hair-splitting front register a cinch—on sheet after sheet, all through the run. They do this by *overfeeding* the sheet to the cylinder gauge pins. That puts the sheet's gripper edge in positive contact with each and every gauge pin.

But that's just part of the story. The real pay-off with Harris feed rolls comes from the way they help control register on the *tail* of the sheet. Paper stretches and shrinks. Cylinder pressure "irons" the sheet so that the tail fans out wider than the gripper edge. This makes it tough to hold register on the tail, especially on large sheets.

Harris feed-roll register puts the fanning action under control of the pressman, and makes it a relatively simple matter for him to hold register on the tail of the sheet. Normally, this means that control of register over the entire sheet is in the pressman's hands every time a sheet goes through the press—whether it's put back on for additional colors, or for precise backup. What's more, Harris feed-roll register is so accurate that two Harris presses of the same size will register with each other.

When you figure that in 120-line work the average dot is only 1/240 of an inch across, you see how close the "profit margin" really is. That's why all large Harrises are equipped with feed rolls. They not only register to a whisker, they can split it right down the middle. That kind of register means more salable sheets in the delivery, more printing profits for you.

Ask your Harris-Seybold representative for the full story, or write Harris-Seybold Company, 4510 East 71st Street, Cleveland 5, Ohio.

HARRIS-SEYBOLD COMPANY

fine graphic arts equipment . . . for everybody's profit

Harris Division • Seybold Division • Chemical Division • Special Products Division • The Cottrell Company • Macey Company • Harris-Seybold (Canada), Limited

Feed rolls force leading edge of sheet to conform to the arc of the gauge pins. Visible downward "buckle" is result of pressure which forces sheet's leading edge into this arc. Grippers are about to close on leading edge.

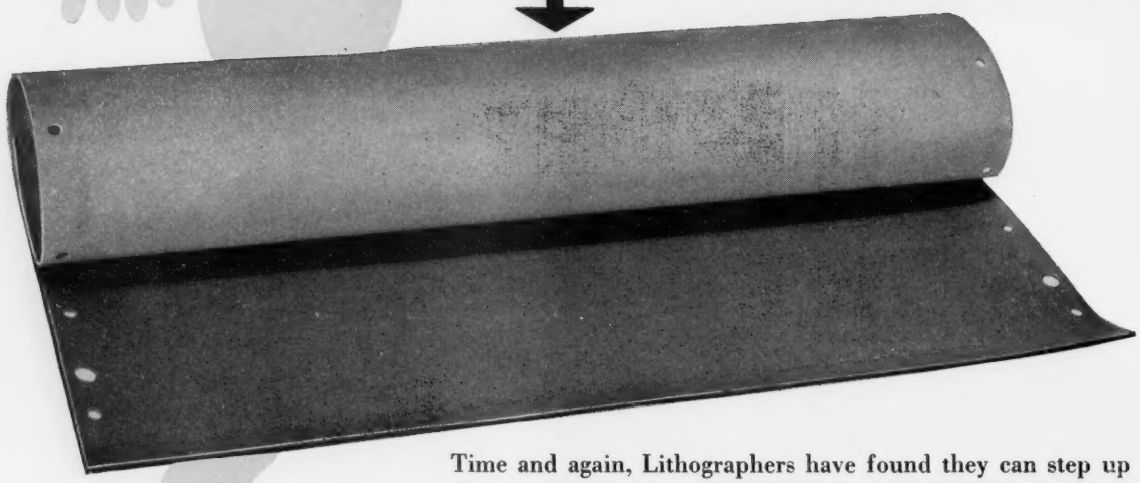
Sheet is now carried by the feed-in cylinder. Pressure of feed rolls has been released, and grippers now maintain arc in the leading edge. This arc governs fanning action, thus giving the pressman control of register on the tail of the sheet.

Harris builds a full line of offset presses

—all except the smallest sizes, which don't require them, have FEED ROLLS.

	Press Size	No. of Color Units 1	2	4	5
3-POINT REGISTER	14½ x 20½"	●			
	17½ x 22½"	●			
	23 x 30" A	●			
HARRIS FEED-ROLL REGISTER	23 x 30" B	●			
	23 x 36"*	●	●		
	31 x 43"		●		
	36 x 48"	●	●		
	43 x 59"	●	●	●	●
	51 x 73"	●	●	●	●
	52½ x 77"	●	●	●	●

YOU'LL HAVE FEWER LITHOGRAPHIC NIGHTMARES WHEN YOU PUT THE JOB TO BED WITH THIS BLANKET!



Time and again, Lithographers have found they can step up their production rate AND QUALITY OF WORK when they use Siebold's SILVER GREY Blankets.

This superior product enables you to get a true picture of the image *before it reaches the sheet.* You can foretell at a glance, the sharpness of the Dot, the clarity of the Highlight, the true reproductive value of the Halftone.

The result, of course, is that you have greater assurance of turning out an A-1 job.

Try a Siebold "SILVER GREY"—and see for yourself!

"OVER A HALF CENTURY OF SERVICE"

SIEBOLD

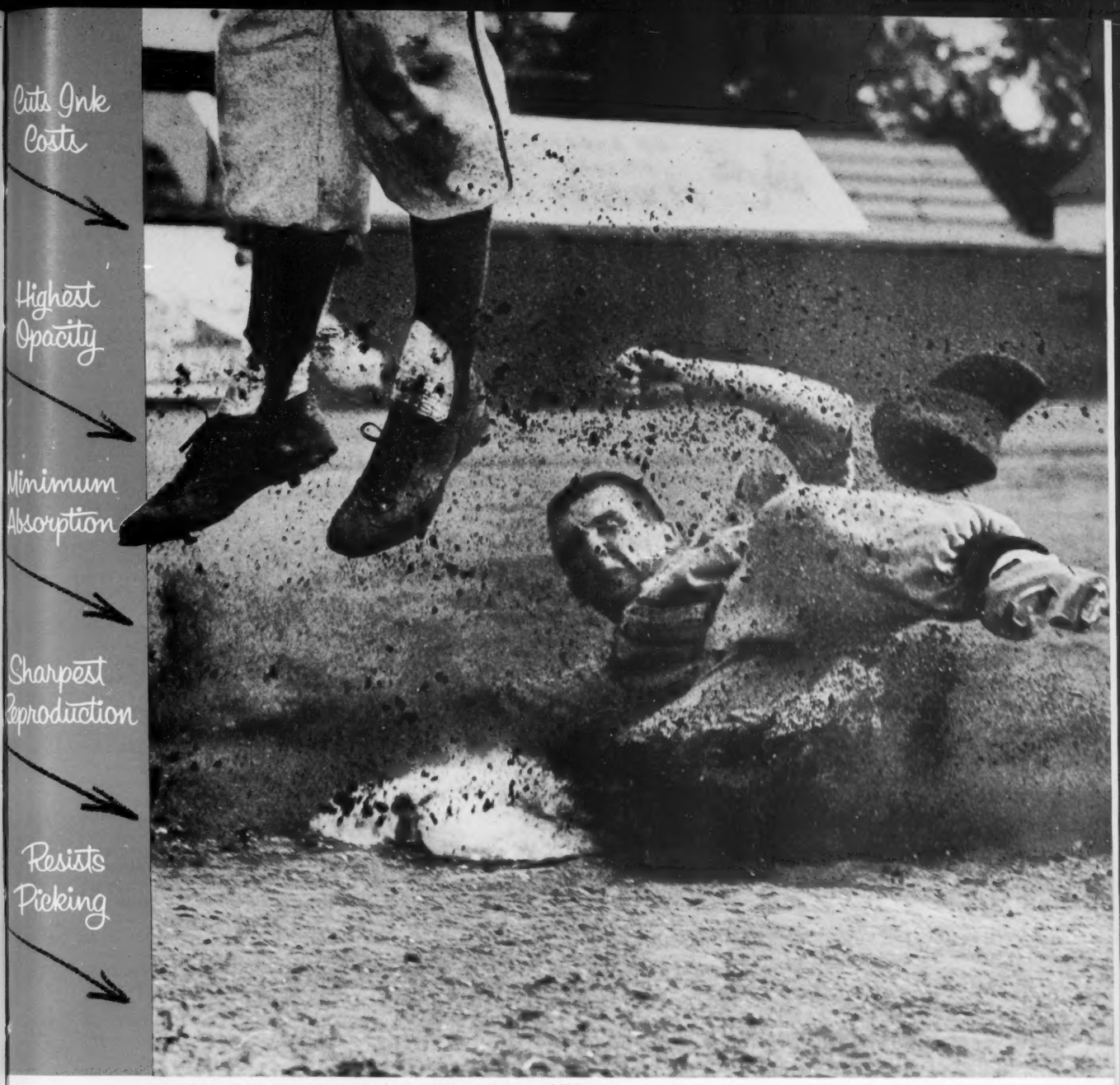
TRY OUR FRENCH MOLLETON

J. H. & G. B. **Siebold** INCORPORATED

MANUFACTURERS OF PRINTING, LITHOGRAPHIC **INKS** AND SUPPLIES

150 VARICK STREET • (Dept. C) • NEW YORK 13, N. Y.

MEMBER: Lithographic Technical Foundation—National Association of Printing-Ink Makers—National Printing-Ink Research Association—N. Y. Employing Printers Association.



Grand Prize Sports Photo taken by Paul Siegel, Minneapolis Star and Tribune.

HITS ALL THE BASES on jobs requiring coated papers

It's Glidden Alpha Protein coated paper, the new material for offset papers that is superior on every count.

Paper with Glidden Alpha Protein coating makes possible faster press runs, lower ink consumption and cleaner, sharper reproduction. In addition, the paper has greater smoothness, stronger resistance to picking, higher opacity, more brilliance and will fold perfectly.

If your supplier does not stock paper processed with Glidden Alpha Protein, please mail the attached coupon for complete information.

Glidden ALPHA PROTEIN PROCESSED PAPERS Glidden QUALITY PRODUCTS

THE GLIDDEN COMPANY

Chemurgy Division

1825 N. Laramie Street
Chicago 39, Illinois

YES...

I am interested in more information about Glidden Alpha Protein; and I would like the names of suppliers in my area.

Name_____

Address_____

City_____

State_____

Title_____

This advertisement is lithographed on paper processed with Glidden Alpha Protein. It is typical of the superior reproduction that can be obtained.

You can bet
I'll remember!

my first summer with Ideal Lithographic rollers

For the first time I could see the rollers being kept really clean • the same ink colors front to back • really solid solids • no hickeys • high class work • compliments from customers —— You can do the same thing with

Graytone —gray synthetic rubber for linseed and heat set inks

Masterlith —vulcanized oil for linseed inks

Lithocraft —synthetic rubber for linseed and heat set inks

IDEAL ROLLER & MANUFACTURING CO.

Long Island City 1, N. Y. **Chicago 8, Ill.** **Huntington Park, Cal.**

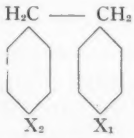
(*Continued from Page* 83)

tive constituent is a quinone-(1:4)-diazide which is difficultly soluable or insoluble in water and soluble in an organic solvent. Preferably a quinone-(1:4)-diazide of the benzene or naphthalene series is used which is difficultly soluble or insoluble in water and which contains at least one esterified or amidated sulphonic acid or carboxyl group as a substituent in the molecule.

*Photosensitized Material for Photochemical Reproduction. *Belgian Patent* 521,631. Kalle & Co. A.G. *Monthly Abstract Bulletin* 40, No. 10, October, 1954, page 440; *Printing Abstracts* 10, No. 3, March, 1955, page 152. Presensitized lithographic printing plates are prepared by coating a suitable support, such as aluminum foil, with an alkali-soluble resin consisting of an alkyl-, alkoxy-, nitro-, hydroxyl-, or carboxyl-substituted nitro-naphthalene-sulphonic acid ester or amide, e.g., 1-methyl-5-nitronaphthalene-4-sulphanilide. Amides and esters containing several nitronaphthalenesulphonyl radicals, e.g., p:p'-bis (1:8-nitronaphthalene-sulphamido) diphenylmethane, are more photosensitive than the simpler molecules. After exposure through a negative, the printing plate is developed with a dilute alkaline solution, 3% aqueous trisodium phosphate.

*Light-Sensitive Reproduction Material and Process for Production of Copies Therefrom, Especially Printing Plates. *British Patent* 717,321. Kalle and Company, A.G. *Printing Abstracts* 9, No. 12, December, 1954, pages 844-845. A support is coated with two superimposed light-sensitive layers. The layer nearer the support contains a water-insoluble diazo compound, which has the constitution of an ester or amide of a sulphonic or carboxylic acid of an ortho-diazo-phenol of the benzene or naphthalene series as light-sensitive constituent and the superimposed outer layer is a hydrophile colloid layer containing light-sensitive material which on exposure exhibits a tanning action upon the colloid.

*Presensitized Lithographic Plates. *German Patent* 885,189. M. Tomanek and W. Neugebauer. *Monthly Abstract Bulletin* 40, No. 7, July, 1954, page 286; *Printing Abstracts* 9, No. 12, December, 1954, page 845. Lithographic plates are sensitized with one or a mixture of the following:



in which X_1 is halogen, nitro, alkoxy, acylamino, acyloxy, or an acyl (COR), in which R is aryl, alkyl, or arlkyl; and X_2 is hydrogen or one of the aforementioned groups. For example, 2% of 6-nitro-5-benzoylacenaphthene in glycol monomethyl-ether is coated on a mechanically grained aluminum plate, dried, exposed through a halftone or line negative, developed with 5% phosphoric acid in 5% ethanol, and inked to give a positive offset printing plate.

Lithography—General

Thirty New Plants. *Printing Equipment Engineer* 85, No. 6, March, 1955, pages 47-70, 72-73, 80, 82 and 84 (29 pages). Illustrated descriptions of commercial, publication, newspaper, book and platemaking plants which have been built recently, are now in process of construction or will be erected soon. Those included are: William Feather Co., Progress Litho Co., Magill-Weinsheimer Co., Standard Printing Co., Alco-Gravure, Division of Publication Corp., Gordon Printing & Litho Co., Rochester (Minn.) Post-Bulletin, H. C. Young Press, Press-Enterprise, Camden (N.J.) Courier-Post, Gile Letter Service, Benton Harbor News-Palladium, Corydon M. Johnson Co., Raleigh News and Observer, Marathon Corp., Seaside Publishing Co., Master Engravers, Dayton Daily News, Augsburgh Publishing House, Clinton (Ia.) Herald, Tucson Newspapers, Inc., Rapid City (S.D.) Daily Journal, Peoria (Ill.) Journal-Star, Aurora (Ill.) Beacon-News, Alan S. Browne, Inc., Winona (Minn.) Daily News, Conroe (Tex.) Courier, Corning (N.Y.) Leader and Houston Post.

Substitutes for Lithographic Health Hazards. Melvin Gevert. *Lithographers Journal* 39, No. 12, March, 1955, pages 14-15 (2 pages). Article covers efforts of Union Committee to detect harmful chemicals and solutions used in litho plants; to find substitutes; to minimize chance of dermatitis when no substitute was available. Use of Kerodex, protective hand cream, is discussed. Materials checked included etches, fountain solutions, solvents for cleaning film, press rollers, and blankets, plate image removers, harsh soaps, and turpentine.

Correct Year-Around Air Conditioning Necessary. C. F. King. *Inland Printer* 134, No. 6, April, 1955, pages 58-59 (2 pages). Standard conditions of temperature and relative humidity are essential in the lithographic industry. In recent years there has been a trend away from central air conditioning installations to package units. Besides eliminating ductwork, package units are easily adapted to various conditions with cheaper initial costs. Operating expenses and the cooling water problem are also briefly discussed. The use of air cooled condensers is proposed.

*Device for Cleaning Inked Printing Surfaces of Rotary Duplicating Machines. *U.S. Patent* 2,704,029. H. F. George. *Official Gazette* 692, No. 3, March 15, 1955, pages 309-310. 1. A device for cleaning inked surfaces of rotary printing machines having a blanket cylinder, said device comprising a wiping member pivotally movable into and out of operative contact with the surface to be cleaned, a container for storing the cleaning solution, a conduit, one end of which is connected to the container and the other end of which is adjacent the wiping member to direct the flow of cleaning solution therebetween, a normally closed spring urged valve located in said conduit between said container and said wiping member for preventing the flow of the solution through the conduit, a vertically disposed rod movable to engage and open the valve, and a hand lever for controlling the pivotal movement of the wiping member toward and away from the surface of the cylinder, said hand lever engaging said rod and serving to open the valve when actuated to wiping position.

*Planographic Printing Press and a Process of Printing. *British Patent* 719,239. W. H. Wood and H. A. Pritchard. *Printing Abstracts* 10, No. 2, February, 1955, page 73. The difficulties involved in applying the ink-repellent material by means of rollers are indicated. These are claimed to be overcome by using electric force to convey the finely-divided material (e.g., water which may contain gum arabic, phosphoric acid, chromic acid, etc.) to the printing plate.

Disposable Dampener Roll Covers. J. F. Dowdall and Frank Ireland. *Modern Lithography* 23, No. 2, February, 1955, pages 41-42. This article describes the paper dampener covers developed by the Printing Products Division of Minnesota Mining and Manufacturing Co. It has been found that 45 pound pure vegetable parchment is a useful weight from the standpoint of durability, ease of application and press operation. Among the advantages listed are that covers are inexpensive, simple and fast to apply, remain clean on press, lint free, and transfer water very uniformly. Disadvantages are that they are difficult to use on large presses, must back up press carefully, drying overnight results in shrinkage, and seamless molleton covers must be used for long usage.

*Devices for Moistening Rotating Rollers. W. Koch. *British Patent* 714,409. *Printing Abstracts* 9, No. 11, November, 1954, page 759. A device for moistening the peripheral surface of a rotary roller by the action of compressed air on a liquid carrier from which the liquid is blown comprises a perforated hollow cylindrical liquid carrier rotatable in a liquid, a compressed air ejector located within the cylinder and a freely rotatable roller in contact with the peripheral surface of the rotating roller to distribute the blown liquid evenly over the surface.

*Regulable Moistening of Rotary Printing Plates. *British Patent* 714,326. Faber and Schleicher A. G. *Printing Abstracts* 9, No. 11, November, 1954, page 758. The disadvantages of the usual spray moistening devices are: (1) the nozzles soon become obstructed by the impurities in the water, and (2) the water mist produced is not sufficiently even when a large number of nozzles are employed. The invention provides an arrangement in which compressed air is forced on to a liquid carrier. The distance between the liquid carrier and the printing plate can be varied. The liquid carrier may consist of a belt which travels over a doctor, preferably driven at a regulable speed.

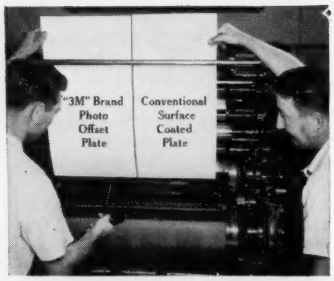
(*Continued on Page* 151)

Here's the "Naked Truth"

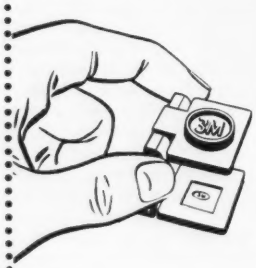
. . . Proof-Positive:

"3M" Plates beat heat and humidity!

A direct comparison test by Interstate Printing Co. in hot, humid Houston offers proof-positive that conventional surface-coated plates can't compare with "3M" *grainless aluminum* Photo Offset Plates. Here in an actual "naked truth" test, duplicating the heat and humidity every lithographer faces in the summertime, Interstate proved: While conventional plates oxidized and scummed, "3M" Brand Plates were *absolutely unaffected* by heat and humidity. Exposure and development time on "3M" Plates remained constant. On the press, "3M" Plates' smooth, grainless surface resulted in far superior printing quality. See the naked truth yourself in the unretouched photo above.



See A "Naked Truth" Test in Your Plant —A revealing, proof-positive demonstration of "3M" Photo Offset Plate's superiority over conventional surface-coated plates can be arranged without obligation. See for yourself the "Naked Truth"... mail the coupon below TODAY.



MINNESOTA MINING & MFG. CO., DEPT. ML-65, ST. PAUL 6, MINN.

"Humid or Hot . . . They Hold the Dot"

3M Photo Offset Plates

BRAND

World's Largest-Selling Sensitized Aluminum Photo Offset Plates

Please arrange for a "naked truth" test in my shop, without obligation.

We have a_____press. Position_____

Name_____ Company_____

Address_____ City_____ State_____

3M COMPANY

The term "3M" is a registered trademark of Minnesota Mining & Mfg. Co., St. Paul 6, Minnesota. General Export: 99 Park Avenue, New York 16, N. Y. In Canada: London, Ontario.

PHOTOGRAPHIC Clinic

By Herbert P. Paschel
Graphic Arts Consultant

Q: We are building a new darkroom and would like to know if it is necessary or advisable to paint the walls black. R.H.P., Yonkers, New York.

A: It is absolutely unnecessary to have black walls in a darkroom if the room is absolutely lightproof. If the walls are white or light grey you gain considerably in efficiency, eye comfort and safety since the reflection of the darkroom safelight illumination will make objects within the room more visible. Of course, the safelights must really be safe, otherwise the sensitive material will become fogged. If the safelights are not safe then it makes little difference what the color of the walls is. With leaky darkrooms (white light coming in through cracks) the use of black would eliminate reflections from the walls to the working surfaces. However, light coming through from the outside which falls directly on the critical working surfaces will not be affected by the color of the walls.

Except for possible psychological effects, the use of colors other than neutral offers no technical advantages. Your first consideration should be to build an absolutely light tight darkroom. Secondly, install enough, photographically safe, safelights. Finally, paint the walls to obtain the maximum reflection and visibility.

Q: What is the difference between "color-blind," "orthochromatic" and "panchromatic" emulsions? What determines the use of one over the other? A.C.C., Elmhurst, New York.

A: The sensitive element of a photographic emulsion is a silver compound whose basic sensitivity is to the blue rays of lights. Since such an emulsion does not respond to wave lengths beyond the blue region, it is considered "color-blind." By treatment with dyes, the basic sensitivity can be extended to embrace all of the wave lengths in the visible spectrum in which case the finished emulsion is termed "panchromatic." A partial extension in sensitivity beyond the blue results in an emulsion which reacts to the blue, green and yellow rays of light and this is called "orthochromatic." When to use any one of these emulsion types depends upon a variety of circumstances and physical requirements. If you wanted to reproduce a red as black you could use any one of the three, but with the panchromatic emulsion you would have to use a red absorbing filter. Conversely, if you wanted to reproduce the same red as white, or according to its brightness, you would be limited to the use of a panchromatic material with or without a red filter.

The nature of the exposing light also influences the choice. With a light having very little or no blue rays, the use of a color-blind material would result in extremely long exposures, or no exposure at all. In such cases either the orthochromatic or panchromatic sensitivity would be required. The latter part of your question is one to which a simple answer cannot be given. It is complicated enough to warrant your consulting a good textbook on the subject.

This is one of a series of "Photographic Clinics," consisting of questions and answers covering all phases of photography for lithographic reproduction. Mr. Paschel is a well-known consultant and contributor to this magazine. Subscribers should send questions to

Herbert P. Paschel
c/o Modern Lithography
Box 31
Caldwell, N. J.

Q: What are interference filters and how do they differ from gelatin filters? Can they be used in color separation work? A.D.S., Louisville.

A: There is considerable difference. Gelatin filters are thin films of colored gelatin which function by an inherent property to absorb certain wave lengths of light and transmit others. The same applies to filters of colored glass and plastic. Filters that operate by absorption seldom are 100 percent efficient; they invariably absorb some of the wave lengths they are supposed to transmit and often transmit some of the wave lengths they should absorb. The efficiency varies with the color of the filter. A gelatin filter that merely absorbs some of the light it should transmit without transmitting in regions where total absorption is required usually will satisfy most separation requirements. Such slight absorption in the main region of transmission can be compensated for by adjustment of exposure.

Interference filters operate on the totally different principle of wave reinforcements and cancellation. The colors seen in soap bubbles, oil slicks and Newton's Rings are common examples of color formation by the interference phenomenon. A transmission interference filter consists essentially of two semi-transparent reflecting surfaces coated on either

(*Continued on Page* 153)

News ABOUT THE TRADE

LNA's 50th Anniv. Convention

Lithographers National Association's 50th anniversary convention, June 20-22 at the Lake Placid Club, N. Y., will be ". . . an historical moment of great significance," said Carl R. Schmidt, president of LNA. Reviewing LNA's history since 1888 when a small group of lithographers in Buffalo organized the National Lithographers Association, forerunner of the present LNA, Mr. Schmidt added:

"The total number of skilled personnel engaged in the industry has grown from 8,000 in the 1920's to more than 30,000 today. In the 20's there were 300 lithographic plants in the U.S. producing approximately 75 million dollars worth of lithography annually. Today, there are more than 3,000 plans whose total annual sales is conservatively estimated at more than three-quarters of a billion dollars."

Mr. Schmidt urged members to send reservations in immediately for the golden anniversary convention at Lake Placid this month.

•

Schmidt Honors 50-Year Men

Jack Barnes, Joseph Reyes, Richard Schmidt and Bernard H. Schmidt were toasted last month at a testimonial dinner at the Merchandise Mart, San Francisco, for completing 50 years of service with Schmidt Lithograph Co. Four others with more than 50 years of service were also present at the dinner. They are Carl R. Schmidt, Otto Schoning, Max Schmidt and Herman Diedricks.

Taylor Feted by New York Printers

D. H. Taylor

More than 1,000 New York printing industry executives honored Don H. Taylor, president of the New York Employing Printers Association, at the annual dinner meeting of the association, May 23, at the Hotel Commodore, New York. The dinner marked 25 years of outstanding service by Mr. Taylor to the printing industry and also celebrated the 90th anniversary of the founding of the association.

William H. Walling, president, Rogers Kellogg, Stillson, Inc., former president of the New York association and now president of Printing Industry of America, was the principal speaker.

Charles E. Schatvet, chairman of the board of NYEPA, said that out of the approximately one thousand commercial printing companies in the New York area the NYEPA has 843. Don H. Taylor joined the association in 1930 as assistant secretary of its Printers League Section, became secretary of the section in 1933, was named executive vice-president of the association in 1935, and in 1954 he was named president.

Southwest Litho Clinic Scheduled for June 11-12

The Fifth Annual Southwestern Litho Clinic in Dallas will show a complete four color process job, from the making of an original transparency to proofing on the press; also, a closed circuit television hookup will be used.

The demonstration on the 11th will be given by Robert Schulz and Paul Braman, Eastman Kodak Co., including shooting the transparency preparing masks, making separations, screening positives, dot etching and stripping.

The program on the 12th will cover platemaking and actual press runs of the color process job. Data sheets, step-by-step details and progressive proofs will be available for those attending. Registration begins Friday afternoon, June 10 in the French Room, Adolphus Hotel.

Concurrently with the clinic, the first Southwestern Lithographic Exhibition will be held in the Grand Ballroom, June 10.

•

Eureka Expands in Scranton

A further addition totaling $500,000-$1,000,000 on a building program began last January was announced recently by Eureka Specialty Printing Co., Scranton, Pa. In January the first phase of a construction program began with an announced cost of $300,000.

Brown & Bigelow Ups Execs

Charles A. Ward, president and general manager of Brown & Bigelow, St. Paul, Minn., announced last month new appointments of executives in the company's subsidiaries.

H. L. Klein was named president of the advertising subsidiary, while Mr. Ward, who had held this post, was elected chairman of the board of the parent company.

At Herb-Shelly, Inc., Farmington, Minn. polyethylene bag and liner manufacturing firm, F. E. Gruber was advanced to president. D. C. Elder, who had been general sales manager was made vice president.

Mr. Ward was elected president of Western Lithograph Co., Los Angeles, and Jerome Bishop was named vice president of the firm's Westline division. John Shaw is vice president and director of sales for the company and John B. Overall is general sales manager.

D. C. Mathews was elected vice president and director of the Century Envelope Co., St. Paul, and vice president and director of the Quality Park Envelope Co., St. Paul. He is also president of Quality Park Box Co. in that city.

•

Restauranters See Litho Work

Tri-State Litho Art, Inc., Sturgis, Mich., and Royal Paper Products Co., Coatesville, Pa., promoted their line of paper accessories at the National Restaurant Association's convention and trade show on Chicago's Navy Pier, May 9-13. Tri-State showed napkins, place mats, cocktail coasters and multi-color menu covers. Designs included regional maps, scenic views and other subjects which add to the souvenir value.

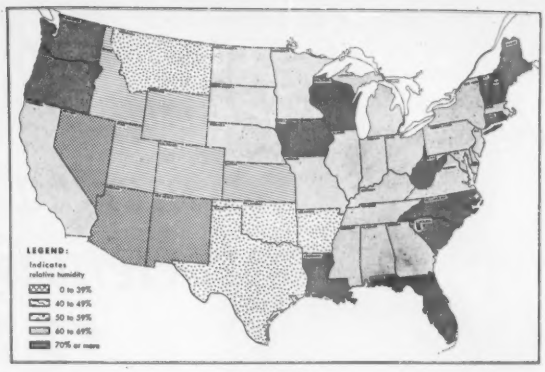
Royal Paper Products Co., Coatesville, Pa., displayed a similar line, plus paper bibs and bath mats. Royal uses both offset and letterpress. Equipment includes a web offset press having a die cutting attachment which does complete jobs with one run through the press.

•

S. Carolina Lithographer Moves

Barfield Printing Co., lithographers and engravers, Greenville, S. C., has opened for business in new, larger quarters at 13-15 West Broad St.

Summer Humidity in Big Cities



A Humidity Forecast for Lithographers prepared from U. S. Weather Bureau records for June, July and August, 1954 shows the average percent relative humidity in metropolitan areas in these states last year. The map was distributed by Minnesota Mining and Manufacturing Co., St. Paul, Minn.

Best Match Book Contest

An awards competition for the best match books of the year, has been announced by the Match Industry Information Bureau, New York. Entry forms are being made available by the Bureau, and a bronze "Joshua" plaque will be awarded for the entry in each of 46 industries judged best from the standpoint of selling copy, art-work and typography. Closing date for entries is Sept. 1, and all match books in circulation during the current year will be eligible.

A plaque award will be given to the best match book used promotionally in the printing industry. Previous awards went to Merrick Lithograph Co., Cleveland; Hampshire Engraving Company, Manchester, N. H.; and Tri-Arts Press, Inc., New York. Certificate awards last year went to Helm, Inc., Detroit; Chicago Show Printing Co. and J. M. Bundscho, Inc. of Chicago; and Associated Typographers, Inc., Springfield, Mass.

Prize plaques are named "Joshuas" after Joshua Pusey, Philadelphia attorney and inventor whose patent on match books in 1892 led to the creation of an industry producing 12,500,000,000 match books a year. Nine-tenths of them are given free, the Bureau pointed out. The seven major match companies comprising the Bureau are D. D. Bean & Sons Co., Diamond Match Co., Lion Match Co., Maryland Match Co., Match Corp. of America, National Match Book Advertising, and Universal Match Corp.

•

Intertype Bd. Chairman Dies

Neal Dow Becker, chairman of the board, Intertype Corp., N. Y., died May 16 at his home in New York. Mr. Becker became president of Intertype in 1926 after serving as president of the Hammond Typewriter Corp. from 1913 to 1924. He became chairman of the board of Intertype May 15, 1952.

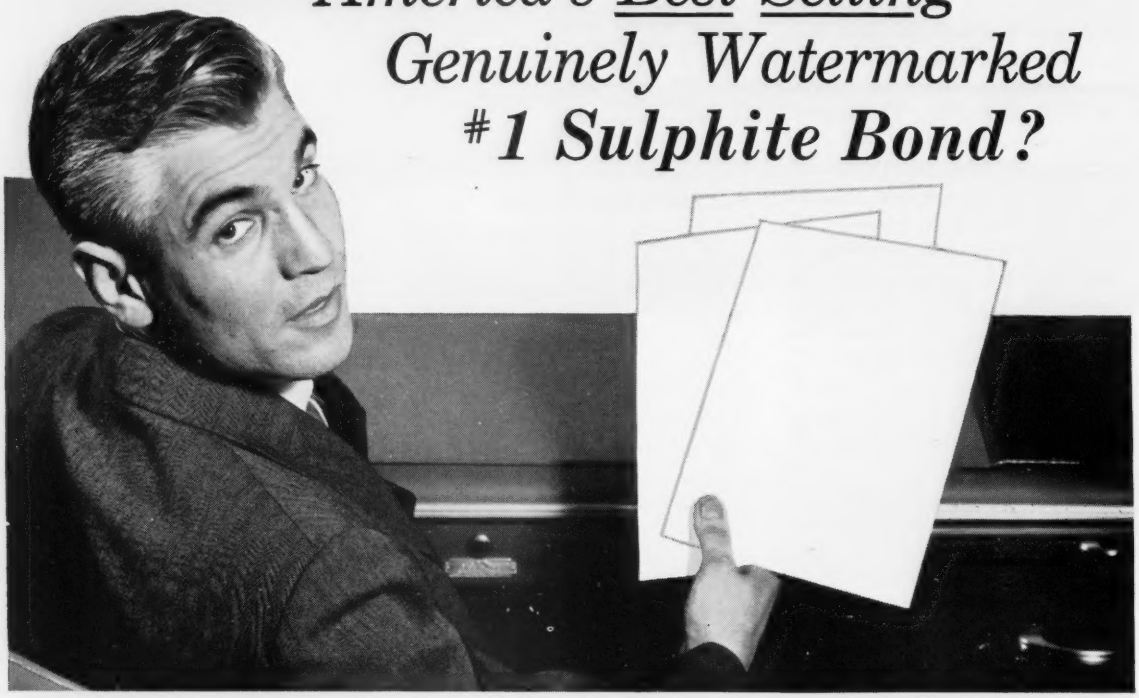
Flint Opens Paterson Plant

The twelfth factory of Howard Flint Ink Co. was opened last month at Paterson, N. J. The new plant with 18,000 square feet of floor space is Flint's first move to service the Eastern market. The company's office in the Chrysler Building, New York will be maintained.

The technical staff in Paterson is directed by Frederick Dankert. Overall operation of the factory will be supervised by John Devine, vice president.

Are You Using Atlantic

America's Best Selling Genuinely Watermarked #1 Sulphite Bond?



? WHY is a genuine watermark important?

It is important to printing quality. Solid ink areas or halftones printed over a stamped "watermark" cause a mark showthrough. This does *not* happen with a *genuine* watermark. But, most important, a paper — to be genuinely watermarked — must be run much more slowly on the papermaking machines. The result — finer formation, stronger paper — a better sheet with better feel, snap and sparkle.

? WHY is Atlantic Bond called "The Printers' Paper"?

Because Atlantic Bond is made *first* for printability. The greater, measureable bulk of Atlantic Bond means sharper impressions — smoother running — less make-ready time. This greater bulk — plus moisture controlled dimensional stability and micromatically accurate trimming — gives a paper that pleases both you *and* your customer.

? Are you now using Atlantic Bond?

There must be several reasons why Atlantic is first in sales in its own field — if you would like to see them for yourself just call your Eastern merchant for enough Atlantic Bond to run your own tests. We'll stand on the results.

Use

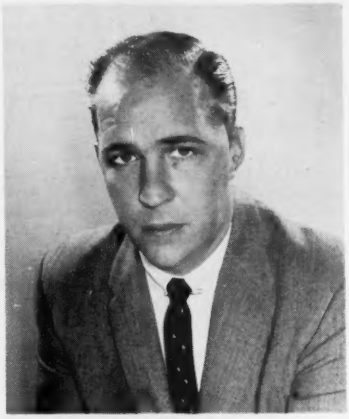
EASTERN

Atlantic Bond

MADE BY EASTERN CORPORATION, BANGOR, MAINE

R & P Names West Coast Mgr.

Appointment of Ken Mills, Jr., as manager of a new territorial sales district, to be called the West Coast



K. Mills, Jr.

District division of Roberts & Porter, Inc., was announced last month by Harry Grandt, vice president in charge of sales. The new division will include California, Oregon, Washington, Wyoming, Utah and Montana. Headquarters will be in Los Angeles. Mr. Mills has been a branch manager in charge of R & P's Los Angeles office for the past five years.

Complete inventories of all R & P products will be maintained at branches of the West Coast District in Los Angeles and San Francisco, Mr. Grandt said.

•

St. Louis Forms New Club

Past presidents of the Associated Printers & Lithographers of St. Louis met April 25 to organize as a group to be known as the PPP (Portly Past Presidents). The presidents will meet at least twice a year, spring and fall and at each spring meeting will induct the current past president of the AP & L. Purpose of the group is good fellowship. Officers are: George Von Hoffmann, chairman of the Board, Von Hoffmann Press, president; Leonard B. Brown, president, A. R. Fleming Printing Co., vice president; Con P. Curran, Jr., Con P. Curran Printing Co., treasurer.

Other members of the PPP are: Earl R. Britt, Sr., Britt Printing Co.; George Hart, Hart Printing Co.; Ed Mernagh, Mernagh Printing Co.; Clyde K. Murphy, Blackwell Wielandy Co.; Frank C. Rauchenstein, Cavanagh Printing Co.; Jesse S. Skinner, Buxton Skinner Printing Co.; John M. Wolff, Jr., Western Printing & Lithographing Co.; G. R. Bardgett, Bardgett Printing Co.; George B. Gannett, The Geo. D. Barnard Co.; Raymond H. Kutterer, Kutterer-Jansen Printing Co.; and Maurice E. Mendle, Mendle Printing Co.

•

Todd, Burroughs to Merge

The Todd Co., Rochester, N. Y., will merge with the Burroughs Corp. of Detroit, it was announced last month in a joint statement from George L. Todd, president of the Rochester firm, and John S. Coleman, president of Burroughs.

Under the plan, subject to approval by Todd stockholders, Burroughs will acquire the assets and business of the Todd Co. in exchange for Burroughs stock.

•

Cal. Lithographers Get Visual Care

Inclusion of a visual care provision in the recently renegotiated health and welfare plan of Local 22, Amalgamated Lithographers of America, whereby employers pay $13 per month per employee, was hailed as a model arrangement for the Southern California area by officers of the union. The plan, begun five years ago, has resulted in payment of more than $121,000 in benefits to Local 22 members. Participants in the health and welfare plan may now receive a visual analysis under an arrangement worked out with the Joint Council of Visual Care, Inc. This provides that a member may select a registered and qualified optometrist or ophthalmologist and receive a thorough eye examination, to be paid for by the health and welfare plan. If glasses or additional services and care are prescribed, such services will be provided for at considerable savings to the participating members.

•

Cost of Influencing People

Neenah Paper Co. is offering a booklet called, "The Cost of Influencing People," to promote the sale of quality letterheads on rag paper. Businessmen are shown three ways they can materially reduce the cost of their letters without sacrificing quality.

Harris-Seybold Names Broadston

T. M. Broadston has been advanced to the newly created position of eastern sales manager for Harris-

T. M. Broadston

Seybold Co., it was announced recently by Ren R. Perry, vice president of sales. Mr. Broadston has been manager of Harris-Seybold's New York district since 1951. He will have responsibility for Harris-Seybold's sales and service from Maine to North Carolina.

Mr. Broadston received his first practical experience in pressroom production in an offset plant where his father was superintendent. He joined Harris-Seybold in 1948 after heading his own graphic art supply firm for several years, was appointed New York metropolitan sales manager early in 1950, and in July of 1951, was promoted to manager of Harris-Seybold's New York district.

•

Mail Adv. Directory Due

Producers of direct mail advertising have just received a copy of Mail Advertising Service Association's third annual Reference and Equipment Directory, according to Max T. Lloyd, executive secretary. It offers a guide to equipment, machinery, supplies and processes in the mailing service industry and contains a new editorial section, compiled and edited by Giles B. McCollum, vice president of Reuben H. Donnelley Corp., Chicago. The new section has offset press specifications of nine manufacturers and several pages of equipment and devices.

The directory is available free in limited quantities.

"Hunt FLASH-O-GRAPH Fixer *lasts longer than any I've ever used!"*

Since we announced our new FLASH-O-GRAPH Fixer several months ago, we've had scores of photographers tell us they are fixing more — many more — square inches of film and prints with it than they've ever done with any other fixer.

We can't say we're surprised. We made it to outperform any fixer, liquid or powder, on the market. Repeated lab tests said it would. But it's actual use in the field that really tells the story.

Photographers get *high speed* too, with FLASH-O-GRAPH. Photo mechanical film clears in less than 20 seconds, commercial pan film in less than 60 seconds, photo papers in less than 45 seconds.

These important savings are ready for you, sure enough, with Hunt FLASH-O-GRAPH. But, of course, they could be ready a hundred years and never do *you* any good—until you try it in your own shop and see for yourself. Right?

So do yourself a favor. Order a carton today and check the results with care. You can order direct from any Hunt Branch, or write for Price List to Palisades Park, N. J.

P. S. You'll also get *better* results with FLASH-O-GRAPH. Because you control the hardening quality of film and prints to suit your own conditions of temperature and humidity, by adding just the right amount of hardener from the separate bottles supplied in each carton.

Each carton of Hunt FLASH-O-GRAPH Fixer contains four 1-gallon jugs of Fixer, four 1-pint bottles of FLASH-O-GRAPH Hardener, and two measuring graduates.

Manufacturing Chemists — QUALITY CONTROLLED HUNT CHEMICALS — *Established 1909*

PHILIP A. HUNT COMPANY

PALISADES PARK, N. J.

Chicago • Cleveland • Cambridge • Brooklyn • Atlanta • Dallas • Los Angeles • San Francisco

Sam'l Bingham Names New VP

John E. Sunderland has been appointed vice president in charge of manufacturing, engineering and personnel for Sam'l Bingham's Son Mfg. Co., Chicago.

Previously, he had been manufacturing superintendent on molded and extruded rubber goods for Standard Products Co.; in charge of development and engineering at Tyre Rubber Co.; and on the development engineering staff at Goodyear. Mr. Sunderyand will be located at the main factory in Chicago.

•

Craftsmen's Convention Aug. 7-10

Hotel Netherland Plaza, Cincinnati, will be the site of the 36th annual convention of the International Association of Printing House Craftsmen, to be held August 7-10. General chairman Lee Augustine has announced the following program and urges members to make immediate reservations. Registration, starting Sunday, August 7 at 9 a.m., will continue throughout the week.

Sunday, August 7: Registration; Baseball —double header—Cincinnati Reds vs. New York Giants (Available—not part of official program nor included in registration); Opening session; Over-the-Rhine party.

Monday, August 8: International Convention Committee meetings; Conventional business session; Address by Mr. John D. Corrigan, "The Dynamic Power in You"; Club Management Luncheon— "Philosophy of Management of Local Clubs," Herbert Livesey, executive secretary, National Association Printing Ink Makers; "Club Program on How our Business System Operates"—Wm. F. Gutwein, chairman, International Supervisory Training Committee.

In the afternoon: "Gravure Steps Out"—Moderator Jos. Jorling, McDonald Printing Co.; "Photo Engraving and Finishing of Rotogravure Cylinders"—Oscar Smiel, Intaglio Service Corporation; "Modern Gravure Presses," Elmer Stacey; E. G. Staude Manufacturing Co.; "Inks for Gravure Operations," Robert Griffith, Interchemical Corp.; "Gravure's position in the Publication Field," Allen C. Black, The Crowell-Collier Publishing Co.; "Gravure Printing in the Packaging Field," Carl A. Ireton, Specialty Papers Co.

Also scheduled for Monday afternoon: "Solutions to Some of Our Letterpress Problems"; "True Rolling—Theory and Practice," Al T. Kuehn, Miehle Printing Press & Mfg. Co.; "Minimum—Precision Make Ready," O. F. Duensing, Vandercook & Sons; "How to Cope with Paper Variations"; "Offset Eliminators and Letterpress Operations."

Tuesday, August 9: International Convention Committee Meetings; Convention Business Session; "Sidelights of Printing," Ken Burchard, chairman, International Technical Committee; "Preventative Maintenance of your Printing Equipment," Russell Anness, Gardner Board & Carton Co.; "The Humanics of Quality Control," B. E. Sooy, Wolverine Carton Co.; "Safety Programs"—Peter Bernard, chairman, International Safety Committee.

In the afternoon: "Printing Week Luncheon," Floyd Larson, chairman, International Printing Week Committee. Presentation of Printing Week Awards — Thomas P. Mahoney, president, International Association of Printing House Craftsmen; "The Michiana Printing Week Story," Rawson H. Murdock, Jr., chairman, Michiana Club 1955 Printing Week Committee; "What Are You Doing About 1956 Printing Week?", Floyd Larson; Lamp Lighter—Inspirational talk by Dr. Kenneth McFarland, educational consultant, General Motors Corp.; "Gimmicks, Gadgets and Instruments," Technical program being arranged by Indianapolis Club.

In the evening: Coney Island Party — Chicken buffet dinner and dancing in Gardens.

Wednesday, August 10: International Convention Committee Meetings; Convention Business Session; "Packaging Clinic" — Moderator, Walter E. Sooy, Gardner Board & Carton Co.; "Package Design and Package Development," Wm. Romney, Procter & Gamble Co.; "Offset Printing of Cartons and Labels"; "Flexographic Printing of Films and Foils," Robert Jones, The Dobeckman Co.; "Letterpress Printing of Cartons," Mel Kernan, The Ohio Boxboard Co.; "Gravure Printing of Paper Wrappers and Labels," Delmore Moffett, Kalamazoo Vegetable Parchment Co.; "Bindery Clinic."

In the evening: Cocktail Party; Annual Banquet and Dinner Dance.

Program for the Ladies:

Sunday, August 7: Over-the-Rhine party.

Monday, August 8: Luncheon-Fashion Show—Souvenirs, Prizes, Hall of Mirrors—Netherland Plaza Hotel.

Tuesday, August 9: Buses leave Netherland Plaza Hotel for Sightseeing Trip; Tea at Kenwood Country Club; Coney Island Party—Chicken buffet dinner and dancing in Gardens.

Wednesday, August 10: Brunch—Sheraton Gibson Hotel Roof Garden; Distribution of lucky number prizes; Cocktail Party in the evening; Annual Banquet and Dinner Dance.

•

Schedule LNA Awards Showings

Following its premiere exhibition for two weeks last month at Marshall Field & Co., Chicago, the 5th Lithographic Awards Competition and Exhibit consisting of the 267 winning pieces of the most outstanding offset-lithography produced in the U.S. will be shown to lithographers and suppliers attending the 50th anniversary convention of Lithographers National Association Lake Placid Club, N. Y., June 20-22.

The Awards Exhibit will be displayed next in the lobby of the Department of Commerce Building, Washington, D. C., Aug. 15-30. It has also been booked for appearance at the Biltmore Hotel, New York, September 12-16, where it will be sponsored by a group of metropolitan lithographers who are members of LNA. Twenty-five thousand copies of the 5th Awards Catalog, containing 44 pages illustrating the winning material, were mailed to buyers.

H. S. Crocker Advances Rodgers

R. J. Rodgers, vice president of H. S. Crocker Co., San Francisco lithographers, printers, and stationers, has been named to head the manufacturing sales operations of the company, according to an announcement by Ed LeVesconte, vice president and general mgr.

Prior to joining H. S. Crocker Co., Mr. Rodgers was sales manager of Willman Lithograph Co., Milwaukee, and before that was associated with Hazel-Atlas Glass Co., Wheeling, W. Va. He joined Crocker in 1950 as West Coast sales manager, later became national sales manager of the company's label division, and then vice president.

•

Carnegie Lists Summer Courses

Carnegie School of Printing Management, Pittsburgh, has scheduled summer courses to begin in all departments June 27. Classes will run to August 6.

Courses are offered in elementary and advanced camera work, chemistry of photography, use of filters and screens, color masking and proofing, platemaking and stripping, Monotype photocomposing machine operation, instruction in making paper, presensitized surface, deep-etch and bimetal plates; operation of Davidson, ATF Little Chief, ATF Big Chief, Harris LTV and Miller E. B. CO presses including four color process work, and ink study.

Enrollment is limited and applicants are urged to register early to assure a place in the courses.

Awards given at the conclusion of the Alumni Seminar at Carnegie Tech's School of Printing Management this spring included: a plaque to professor Homer Sterling; the $100 Bruce Rogers Scholarship to William H. Mowry, Bedford, Pa.; the Reinhold-Gould Award to Charles W. Brown, Memphis, Tenn.; and the Fred Hagen Printing Honor Prize to Stanford H. Rosenberg, Brooklyn, N. Y.

•

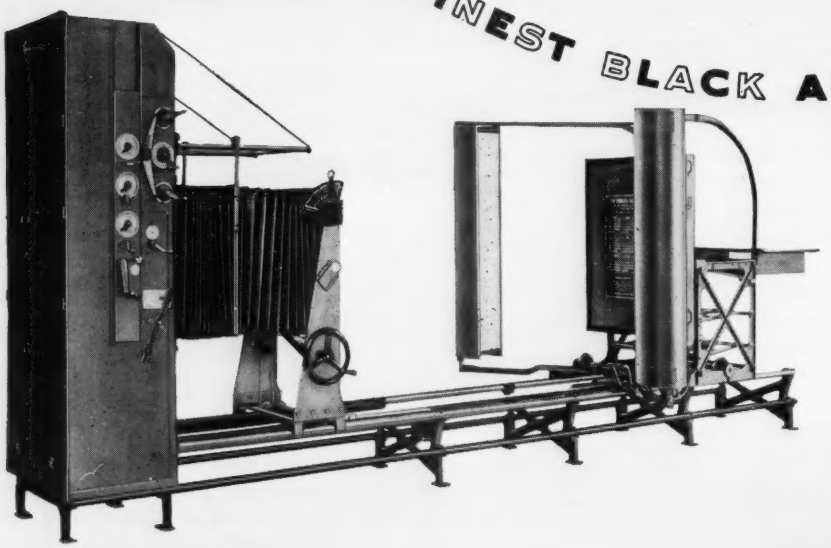
Engel to Sell for G. B. & W.

Adolph Engel has joined the sales organization of Gaetjens, Berger & Wirth, New York, it was announced last month by William Recht, president. Mr. Engel was formerly vice president of Charles Hellmuth Printing Ink Corp., having been with the company for 38 years.

...THE WAY

The CHEMCO System

TO FINEST BLACK AND WHITE



CHEMCO Roll Film Camera Model F

Years-ahead engineering by Chemco makes this the last word in darkroom cameras! The operator rolls down any of three widths of roll film housed within the camera to the dial-indicated length he desires. New screen distance setting with expanded scale, quick, accurate focusing scales, convenient side-arm diaphragm control all help him to achieve precise, rapid production of high quality negatives.

Exposed film from the roll stock is cut with the externally located knife control, and the operator proceeds with shooting an entire series of exposures before entering the darkroom.

CHEMCO Powerlith Film

The 20% faster-exposing orthochromatic litho film, with complete development latitude, that substantially reduces exposure time under all conditions. Provides improved tonal gradation and balance between highlight and shadow for longer scale negatives... true shadow detail with flashing reduced 50% to 100%. Hard dot characteristics meet all requirements, with greater density and contrast for crisper line work and halftone dots... reduces opaquing time considerably. In regular and thin base, both roll and sheet.

CHEMCO Powerdot Developer

A new, long life developer for perfect results in line and halftone, using either Powerlith film or other conventional lithographic and plate-maker's films.

chemco PHOTOPRODUCTS COMPANY, INC. GLEN COVE, N. Y.

ATLANTA BOSTON CHICAGO DALLAS DETROIT NEW ORLEANS NEW YORK

LTF Gives 31st Annual Report

Lithographic Technical Foundation's report to the industry said that the research program for 1954 incorporated a very significant and important transition in LTF research. There was a shift in emphasis from work on development and improvement of new materials and techniques to studies of quality and paper and ink printability.

Of the 26 active projects on the research program for 1954, work was done on 22. Projects include:

1. Investigation of what makes desensitizing or water-receptive layers stick to the surface of a lithographic plate.
2. Study of methods and materials to improve the storage of lithographic plates and increase their life in storage.
3. Investigation of what causes the wetting of metals by water and ink. Also, development of surface treatments to improve wettability.
4. Investigation of methods and techniques for the electro and chemical deposition of metals with possible application to bi-metal plates.
5. Investigation of new and different methods for producing grained surfaces.
6. Study of new methods for measuring grain.
7. Investigation of new materials, techniques, and/or methods to improve the ability of the plate image to attract ink and repel water and gum.
8. Development of the techniques by which lithographic plates can be produced on ungrained metal.
9. Study and evaluation of the factors that affect quality in lithographic reproduction and development of methods, techniques and/or instruments to measure and control these factors.
10. Study and evaluation of the relative efficiencies of the various color masking methods that have been proposed.
11. Investigation of new light-sensitive materials developed for photography or platemaking.
12. Investigation of why paper coatings pile worse on some blankets than on others.
13. Investigation of paper and ink troubles and the development of instruments and methods to test for them.
14. The investigation of picking — LTF Pick Tester.
15. Studies of the stress-strain relationships involved in the transfer of ink during the printing impression.
16. Studies of inconsistencies in Paper Hygroscope readings.
17. Studies of the water wettability and sensitivity of paper coatings and the effects these properties have on printing.
18. Studies of inconsistencies in Inkometer readings.
19. The development of an instrument to measure ink consistency and ink-water balance during printing.
20. Investigation of new systems of dampening lithographic plates on presses. The web scanner (arrow) can view the web at any point across its width. Scanning the stock before it reaches the printing cylinder, it anticipates errors and signals for their correction.

In addition to the foregoing, the research department concluded work on a contract for the Army and continued work on an Air Force contract for research.

There were various non-research activities, the most outstanding being the three closed circuit TV technical forums in Toronto, Nashville, Tenn., and Chicago. The Chicago forum marked the first use of closed circuit color TV for industrial purposes.

Three publications were produced and distributed in 1953 and those additional publications were produced or almost completed in 1954 but were not distributed until early in 1955. They are: "The Science of Physics in Lithography," "The Sensitivity of Bichromated Coatings," "Lithographic Abstracts, 1954," "How to Make and Run Deep-Etch Plates on Aluminum," "Survey of Lithography," and "General Index of the Publications Issued by the LTF."

Training materials made available during 1954 included "Photo-Composing" and Science of Physics in Lithography."

Three tests being revised, "Offset Press Operating," "Deep-Etch Platemaking" and "Retouching" will be issued in 1955. Another revision, "Survey of Lithography," was produced and distributed with the help of the Expediting Fund. A new text on Color Stripping will be issued in 1955 and work is also proceeding on a revision of the text on Color Separation Photography.

Ground Breaking for Chicago ALA

Ground was broken recently at the south west corner of Ashland Blvd. and Adams St., Chicago, for a new headquarters building for Local No. 4 Amalgamated Lithographers of America.

The building will have two stories with full basement and will house the Chicago Lithographic Institute as well as the Union, will cost approximately $350,000.

Left to right are: Harry F. Spohnholtz, vice president, Local #4; Jack Benshop, Rec. secretary, Local #4; Edward Bock, Bldg. committee member; Mr. Carroll, Carroll Construction Co.; Oliver Mertz, int'l vice president, A. L. A.; George A. Canary, president, Local #4; Harry Grady, Bldg. committee member; James Kozak, Bldg. committee member; John Markert, Local #4 scribe; Louis Kilbert, Bldg. committee member; Steve Swigon, Bldg. committee member; Tom Mulig, Naess & Murphy Architects; and George K. Gundersen, Fin'l Secretary-Treasurer.

Newton Falls Names Morrison

Appointment of Joseph F. Morrison to the sales department of Newton Falls Paper Mill, Inc., Newton Falls, N. Y. was announced last month by Ronald W. Hynes, president.

Mr. Morrison has been active in the industry for over twenty years. Prior to joining Newton Falls, he was vice president in charge of sales for Modena Paper Mills, Inc., Modena, Pa.

He will make his headquarters in the New York office of the company.

•

New Bldg. for GPI in St. Louis

The St. Louis branch of General Printing Ink midwest division, Sun Chemical Corp., moved to a new 8600-square foot building, May 15 at 4222 Utah Street, St. Louis.

Installation of modern equipment permits the St. Louis branch to triple production and diversify its manufacturing activities.

•

New Address for TAGA

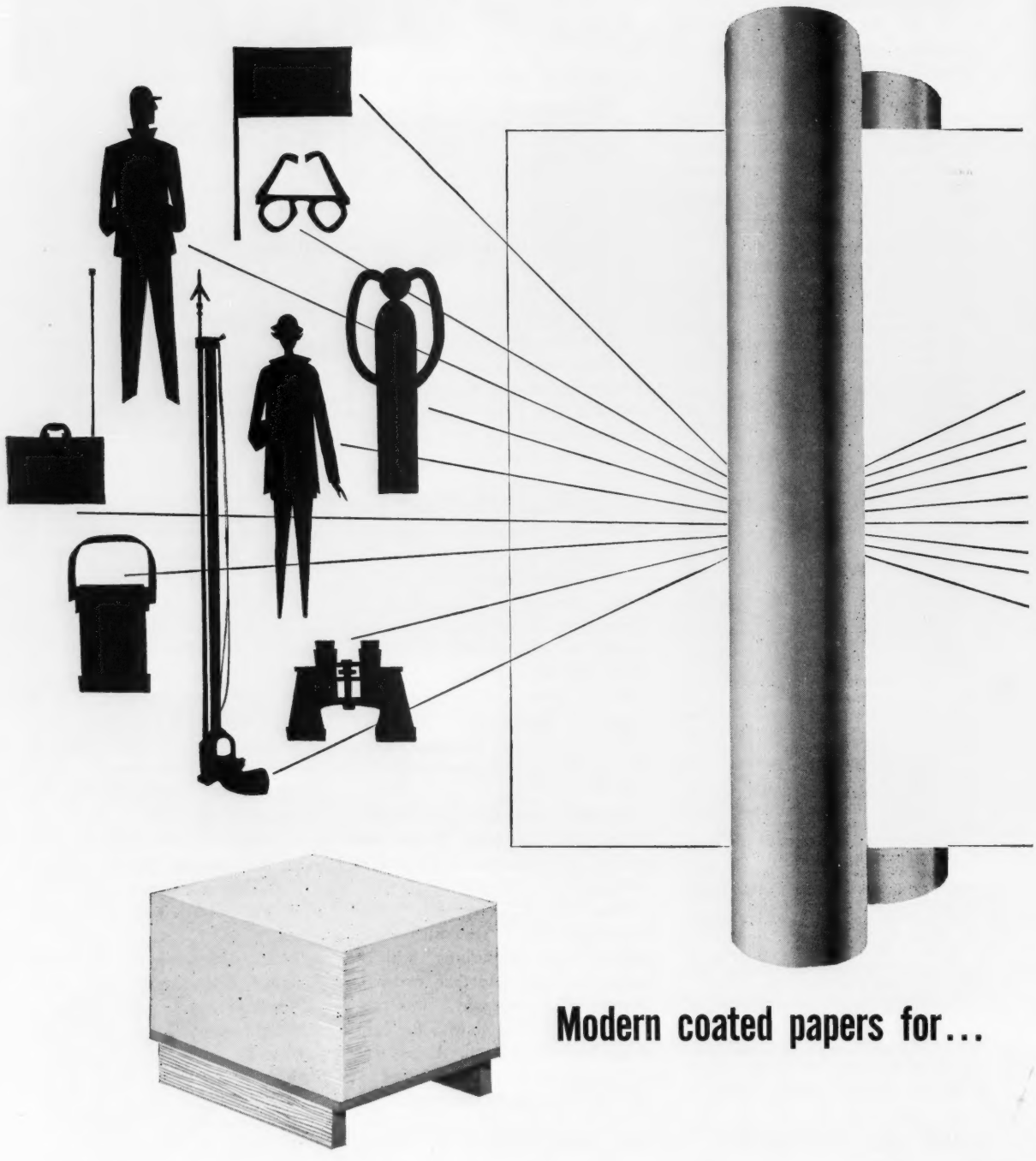
Following is the new address for Technical Association of Graphic Arts:

TAGA, 140 North 6th St., Philadelphia 6, Pa.

Membership applications may be obtained from the above address and sent to:

Virgil P. Barta
TAGA Membership
Rochester Inst. of Technology
Rochester, N. Y.

Everything comes to *life* on



Modern coated papers for...

Kimberly-Clark Hifect Enamel

How modern can a fine paper be? Try Hifect Enamel and see! It's Kimberly-Clark's finest letterpress paper, *engineered* to make the most of the newest inks and techniques . . . *designed* to give you the sharpest, most lifelike reproductions your presses can deliver!

Hifect is smooth—white—and excels in uniformity. Ream after ream has the same balance of dimensional stability, strength, opacity and other features necessary for top performance on the press and in the bindery.

Try Hifect Enamel, and talk to your Kimberly-Clark distributor about the other outstanding papers listed below. You'll find you do your best on Kimberly-Clark stock!

Modern Letterpress: Hifect Enamel, Crandon Enamel, Trufect Coated Book, Multifect Coated Book.

Modern Lithography: Prentice Offset Enamel, Lithofect Offset Enamel, Shorewood Coated Offset, Fontana Dull Coated Offset.

Kimberly-Clark

COATED PRINTING PAPERS

Kimberly-Clark Corporation • Neenah, Wisconsin

Why Do Apprentices Quit?

Answers to questions like "Why do some aprentices quit before completing their apprenticeship? What happens to them after they drop out?," are given in a new booklet just issued by the U.S. Department of Labor.

Titled, "Follow-Up Study of Former Apprentices," the booklet is based on a sample survey conducted by the Department's Bureau of Apprenticeship among approximately 900 former apprentices who failed to complete their training. The survey reveals that nearly one-half quit for higher-paying jobs; most of them needing more money to support growing families. Also, many of those who left for higher wages obtained only temporary financial gain, and eventually would have been better off had they completed their training, the report concludes.

Kinds of jobs the former apprentices were holding two years after they dropped out of apprenticeship, relations of their employment to their training, and extent to which their training helped them in their present jobs, are other subjects discussed in the study.

Copies may be obtained from Publications Branch, Bureau of Apprenticeship, U.S. Department of Labor, Wash. 25, D. C.

•

Nielsen Litho to Start Gravure

Simon C. Nielsen, president of Nielsen Lithographing Co., Cincinnati, announced that the company had purchased the property of the Central Frog and Switch Co. on Wasson Road, Hyde Park, Cincinnati, and plans to use the space for a new gravure division.

The one-story brick building containing approximately 15,000 square feet is located on approximately eight acres of ground with its own private siding on the Norfolk and Western Railroad. The Company expects to start remodeling work on the building at once and it is anticipated that the new division will be in operation by November. Delivery of a new five-color rotogravure press is expected early in the fall. Nielsen presently operates one, two and four color offset presses.

Grant Elected Kirby President

Kirby Lithographic Co., Washington, D. C., has named W. E. Grant as president, it was announced last month. Wallace W. Kirby (Lt. Col., U.S.A., ret.), founder and former president, has become chairman of the board.

W. E. Grant

Other officers are: John M. Boaz and Ray L. Webb, vice presidents in charge of plant operation; and Mrs. P. H. Wilson, secretary treasurer.

Mr. Grant joined Kirby as its first office employee 28 years ago. He was secretary and treasurer of the organization.

Both Mr. Boaz and Mr. Webb had served under Col. Kirby in the Army and joined Kirby shortly after its establishment in 1927. They have been responsible, along with Col. Kirby for the development of many modern techniques of photo-lithography at the Kirby plant.

Last year Kirby moved to a new plant, located at 400 12th St., S.W., Washington, D. C.

•

AP & L Starts Education Series

Associated Printers & Lithographers of St. Louis recently began a series of evening meetings, presenting a review of what makes the printing and graphic arts industry "tick." Two films, "The Gift of Ts'ai Lun," story of papermaking, and "For Time and Salesmen," outlining the management of time in a salesman's day, were shown May 3.

The annual summer outing is planned for June 10 at Norwood Country Club.

Tapley Starts Monthly Letter

To show what can be done with a variety of bindings, J. F. Tapley Co., New York, has initiated a monthly newsletter attaching a different photograph each month illustrating unique bindings. The company, more than one hundred years old, is located in a new square-block plant with all operations on one floor.

•

Los Angeles Adds 500 Estimators

Approximately 500 men and women in the Los Angeles area are qualified to estimate lithographic and letterpress jobs as the result of completing PIA courses in cost-figuring given in the last few months. Lew Williams, Kellaway-Ide Co., was instructor in the association's industry-wide educational program. A companion course has been conducted by Fred Pawell, controller, Parker & Son, Inc., on cost-accounting.

•

Winchell Ups Executives

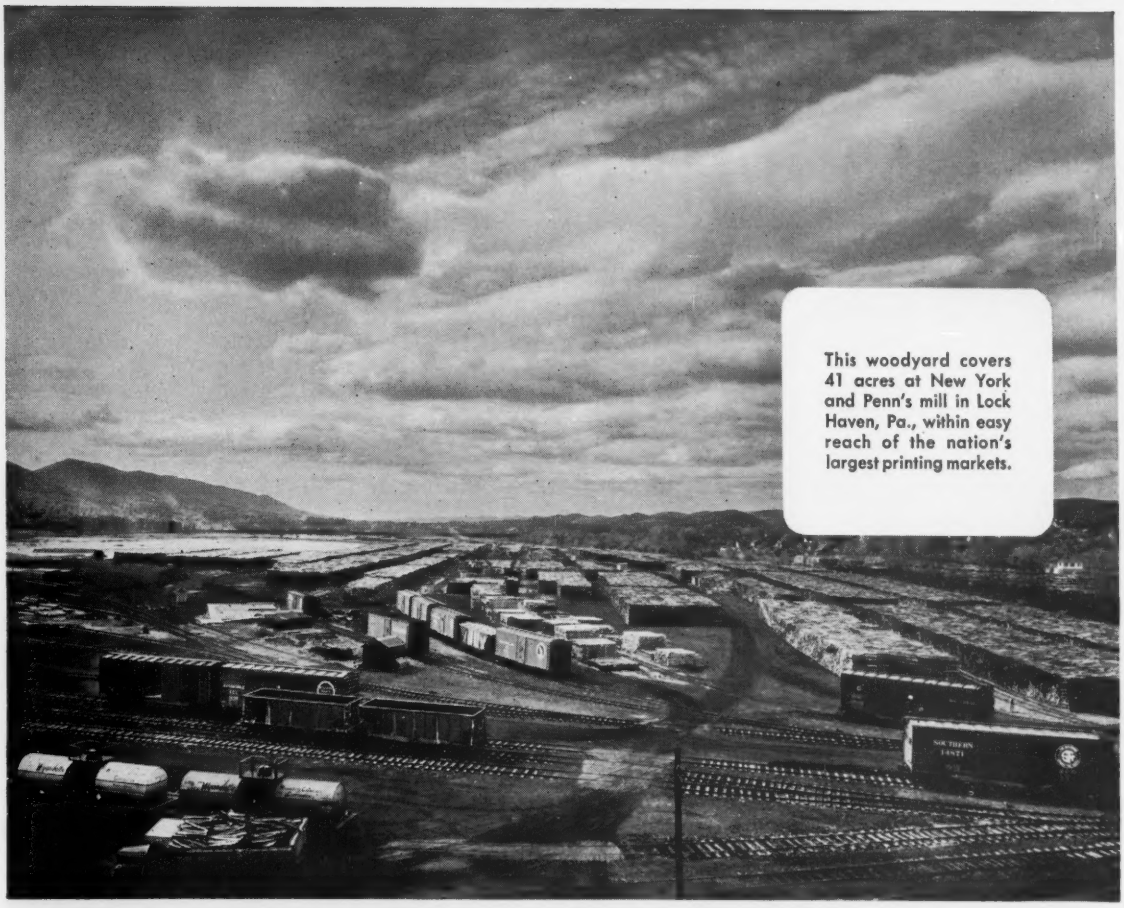
T. A. Winchell & Co., Philadelphia, have announced the following appointments: Robert Hesse, Jr., to vice president, sales; Edward W. Magee to vice president, advertising and sales promotion; Millard Vandegrift to board of directors, and offset plant manager; and Fred Stamberger, to board of directors, and letterpress plant manager.

•

Rossotti in West Coast Deal

Charles C. Rossotti, chairman of the board, Rossotti Lithograph Corp., North Bergen, N. J., announced last month that his company had entered into a reciprocal manufacturing arrangement with the H. S. Crocker Co., San Bruno, Calif. Under terms of the agreement both firms will continue to operate independently, exchanging the complete label and folding box manufacturing facilities of their companies.

The Rossotti California Lithograph Corp., San Francisco, plans an expansion of its sales force to take advantage of the larger more diversified facilities. Plans will be announced shortly. Arrangements included the sale of some Rossotti California's folding box equipment to Crocker Co.


This woodyard covers 41 acres at New York and Penn's mill in Lock Haven, Pa., within easy reach of the nation's largest printing markets.

GREAT PAPERS FROM LITTLE ACORNS GROW

Oak is just one of the woods that New York and Penn farms for its harvest of fine papers. And because New York and Penn produces 80% of its own pulp you can be sure that their natural resource larder is never empty. Tomorrow's paper crop is already growing in scientifically-managed New York and Penn woodlands and on the lands of nearby independent tree farmers.

Small-mill flexibility combined with big-mill efficiency and savings are all part of New York and Penn's scientific management that extends all the way from seedling to finished paper. This attention to detail at every step of the way is reflected, too, in New York and Penn's ability to satisfy (with savings) not only the needs of some of the nation's leading magazines, paper merchants and printers, but the equally special and exact needs of smaller users, too.

Magazine papers? Book papers? Offset papers? . . . yes, all these and others benefit from N. Y. and Penn's 65 years of papermaking experience. You, too, can profit—materially—from this experience. If you have a special paper or cost problem, it will pay you to get the whole N. Y. and Penn story—today. Ask your merchant. Or phone MUrray Hill 6-6090. New York & Pennsylvania Co., 230 Park Ave., New York 17.

New York and Penn

Pulp and Paper Manufacturers

Super • English Finish • Eggshell • English Finish Litho • Offset • Music • Bond • Tablet • Duplicator • Mimeograph • Drawing • Imitation Press Board • and other specialty grades

speed ...mixed for you by Mallinckrodt ...lightning fast

JIFFIX®

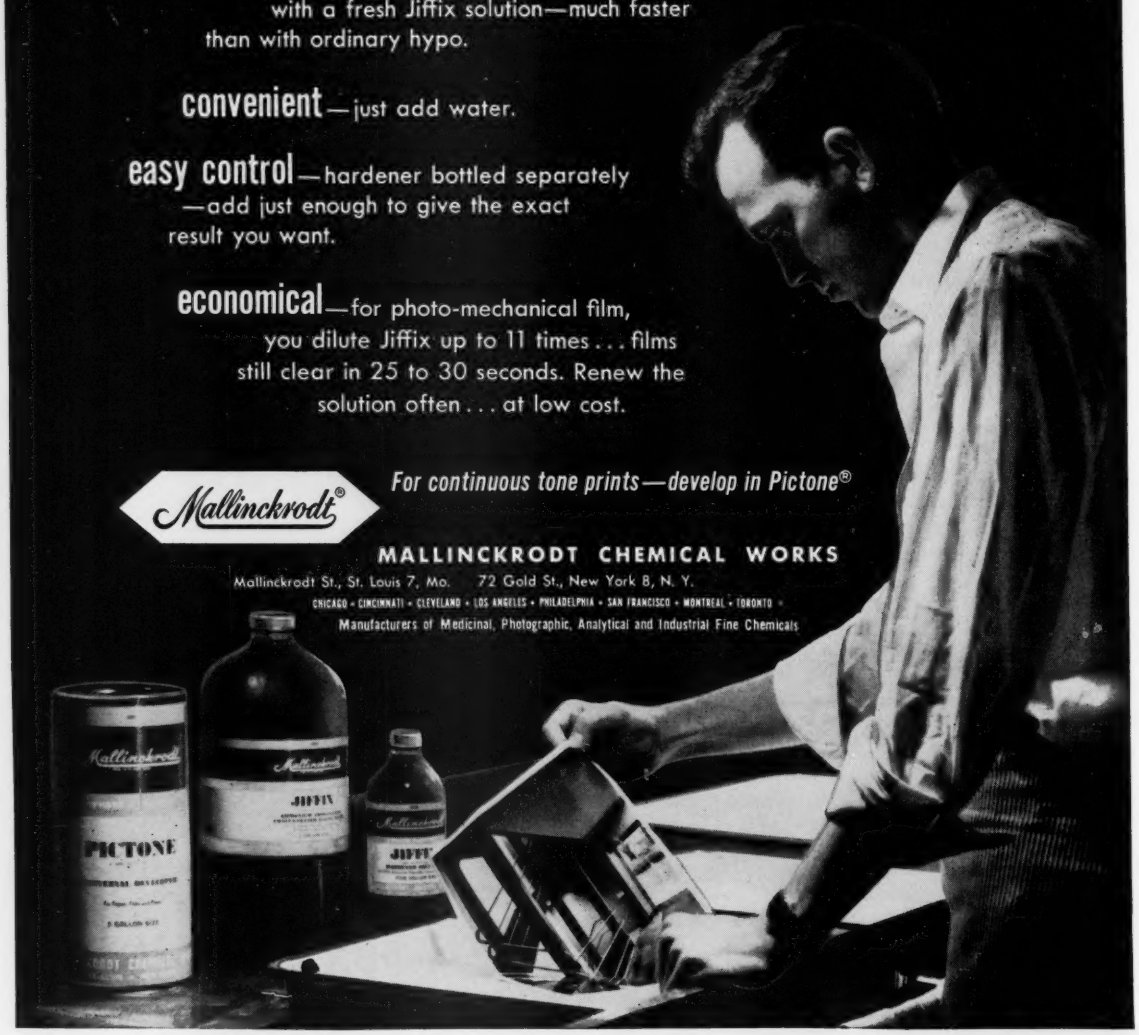
the professional-quality liquid fixer for all film and paper

you fix film in 2 minutes
with a fresh Jiffix solution—much faster than with ordinary hypo.

convenient—just add water.

easy control—hardener bottled separately —add just enough to give the exact result you want.

economical—for photo-mechanical film, you dilute Jiffix up to 11 times . . . films still clear in 25 to 30 seconds. Renew the solution often . . . at low cost.



For continuous tone prints—develop in Pictone®

Mallinckrodt®

MALLINCKRODT CHEMICAL WORKS

Mallinckrodt St., St. Louis 7, Mo. 72 Gold St., New York 8, N. Y.

CHICAGO • CINCINNATI • CLEVELAND • LOS ANGELES • PHILADELPHIA • SAN FRANCISCO • MONTREAL • TORONTO

Manufacturers of Medicinal, Photographic, Analytical and Industrial Fine Chemicals

"A Fresh Approach To Sales"

Allan S. Lassner, vice president, The Comet Press, Inc., New York, told members attending the 10th Annual Convention, Graphic Arts Institute of New England, Boston, March 31, that the greatest difficulty with neophytes, and even with veteran salesmen is the disease known as "customer timidity."

"There's one sure way to know whether you're suffering from "customer timidity," he said. "If you freeze in an office and then when you're out on the street think of the best repartee, and you get the "shuddas," "I shudda" told him this and "I shudda" told him that—then you have customer timidity."

To function properly, Mr. Lassner said that printing salesmen should be prepared with a planned interview, but not with a spiel that can't be broken.

"Don't have the routine of 'I'm from the Remarkable Printing Co. We have day, night and moonlight shifts, 86 linotypes, our messengers are jet-propelled and our compositors descendants of old man Gutenberg. You'll love our beautiful printing.' When a buyer interrupts this recital, don't start all over again with 'I'm from the Remarkable Printing Company. . . ." Keep alert and at the same time be casual. Don't be too obvious in your planning. The loaded question sounds that way many times to the buyer. Point up the benefits.

"Try selling these ways: Convince the man on an opening call you can do a certain thing better than your competitor; that it's to his advantage to deal with you. Be dependable. Get him the dummy, the proposal on time. Suggest and show him economies. He'll love you for it. Be creative if you can. Be dependable in everything you do. Don't let him down on schedule, quality or invoicing. Be an assistant buyer as well as a salesman.

"Deliver the job earlier than the promise if you can. Don't worry about spoiling the customer. How do you feel about your tailor when he delivers that suit a day ahead? If you're going to be late, phone and say, 'Mr. Snodgrass, I'm in trouble.' It works. A late job is often forgiven — a poor job never."

Mr. Lassner advised salesmen to set schedules in working days, not calendar days.

He warned, "Avoid, if possible, estimating at the scene of battle. Sometimes it can't be helped, but estimating at a customer's desk leads to error and also destroys some of the glamor and mystery of our business. See if you can borrow the dummy for an hour or two. Tell him that the estimator doesn't call on customers, you don't think it's fair to do his job.

"If you should present a layout or creative dummy with your proposal you may worry, particularly if the prospect is a new one. You may wonder what will happen to your brain child in case you don't win the marbles. You can't say, 'Don't steal this,' and the sticker that reads 'This is the sole property of the XYZ Printing Company and must not be used without permission' is also offensive. Try this: place a sticker on the layout that reads, 'This layout represents considerable time and thought on the part of our creative staff. If it is necessary to return by mail, kindly insure for $150.00. Thank you.'

"If you're the sort that says, 'Two color presses are uneconomical to run,' or 'Plastic plates aren't satisfactory' or 'offset will never take the place of printing,' beware, you're heading for trouble. How are you going to explain it away when your plant acquires some of these items you've been selling down the river? It would be far better for you to be more objective and temperate in the first place."

•

Ideal Adds Salesmen in Illinois

Thomas H. Hall, former U.S. Air Force photography technician, has joined the Chicago sales staff of Ideal Roller & Manufacturing Co. Mr. Hall, an offset camera and plate making technician for four years with the Air Force, attended New Mexico Military Institute, Texas Tech and the Art Institute of Chicago. He will sell Ideal products in the Northern Illinois territory.

U. S. Playing Card Names VP's

Edwin K. Drake, director of coordination of sales and promotion, and John T. Dale, sales manager, were named vice presidents of U.S. Playing Card Co. last month according to an announcement by Allison F. Stanley, president. They fill vacancies created by the death of the late William Ottmann and the retirement of Louis Coffin. Other officers and all directors were reelected at the annual meeting. Net income of $493,685 was reported for the three months ended March 31.

•

Turner Trouble-shoots on W. Coast

Robert Gans, head of Gans Ink & Supply Co., Los Angeles, has employed Carl Turner, former pressroom foreman for Western Lithograph Co., to provide free advisory service to his customers. Mr. Turner has had experience on both large and small offset presses.

•

Tallman Dies at 84

Lavere V. Tallman, 84, proprietor of Tallman Printing Company, Forty Fort, Pa., died at his home April 25. He was associated with the printing industry for 60 years, the last 30 of which he operated his own plant. He formerly was superintendent of McCall Publishing Co., New York, and also had been associated with the Raeder Blank Book, lithographing and printing company of Wilkes-Barre, Pa.

•

L. A. Host to Craftsmen in '56

Attendance of more than 1,000 is expected at the 37th annual convention, International Association of Printing House Craftsmen in Los Angeles, Aug. 12-15, 1956. The last session of craftsmen held in Los Angeles was in 1930. The Biltmore Hotel has been reserved for members.

Reaugh Fisher has been named general convention chairman, with the following committee appointed: Des Mulhall, Bob Kerr, Gordon Holmquist, Fred Lawton, Dick Hoffman, Lee Farmer, Andy Anderson, Ewart Johnston, Bill Brock, Bruce Greenberg, Robert Parker Jr., Glen Broderick, William Hershey, and Bill Silverman.

3 decades of Inspirations

For the past thirty years, Westvaco Inspirations for Printers has selected stimulating ideas for the appreciation of those who are interested in creative aspects of graphic production. The world of art has been represented by works of old masters and famous modernists. Moreover, this publication has reproduced outstanding illustrations and pictorial design from contemporary advertising sources. In doing so, Westvaco Inspirations for Printers has centered attention on the excellent creative standards achieved by America's commercial artists and photographers.

To commemorate its thirtieth anniversary, Westvaco Inspirations for Printers commissioned Miró, the distinguished modern artist, to create the cover painting for Issue Number 200. Not that all Inspirations fans dote on modern art, you know. But they do enjoy the discovery of what is new and creative in the graphic arts. And, as modern art critics agree, Miró is the most creative of the post-Picasso generation of artists.

Brilliant achievements in the advertising arts require matching standards of craftsmanship in printing and papermaking. In every printing operation, especially where pictorial subjects are reproduced, the choice of the right paper is essential. Printers and advertisers can rely on Westvaco fine papers to provide the proper selection for effective graphic results. More than half a century of papermaking skill and scientific research are invested in producing Westvaco fine papers for specific requirements in every technique of presswork.

Issue Number 200 of Westvaco Inspirations for Printers brings you a "flash-back" on the developments of printed salesmanship during three eventful decades. Obtain a free copy of this publication by merely requesting it. Phone or write your nearest Westvaco distributor or any of the Company addresses listed on this page.

Cover artist

Joan Miró was born in Montroig, Spain, in 1893. He entered the School of Fine Arts, Barcelona, at 14, studying for two years before parental persuasion caused him to become a clerk. Later he studied at the Gali Academy, and from 1915 worked independently and without scholastic conventions, spending part of each year in Paris. He first exhibited in Barcelona in 1918, and subsequently many times in Paris and in New York. In painting he has experimented with many mediums, and is also a sculptor and lithographer. A mural commissioned by a Cincinnati hotel was shown first in the Museum of Modern Art, New York City, in 1948, and in 1951 he completed a panel for Harvard University.

West Virginia Pulp and Paper Company

Painted for West Virginia Pulp and Paper Company
By Joan Miró

230 Park Avenue, New York 17
35 East Wacker Drive, Chicago 1
503 Market Street, San Francisco 5

Inspirations for Printers

Army Chooses Chicago

The Chicago Lithographic Institute has been selected by the U. S. Army Air Force to provide certain air force personnel with a "post graduate" training course in lithography related to chart reproduction, it was announced last month. The program, which has been under way for several months, brings successive detachments of men to Glassner House, most of whom have already had the regular 2-year training course provided by the Army in its own litho units. Those men selected are understood to be key men who will become top sergeants or commissioned officers in the Army. They are at Glessner House for 12 weeks, four devoted to camera work, four to stripping and plate making and four to press work.

Under terms of the contract with the Army, the Institute provides practical, experienced journeyman instructors and makes available all equipment and facilities needed for the training work. This staff, all Chicagoans, specially hired on a full time schedule includes: Frank Oehme, formerly with Printing Developments, Inc., who handles press operations; Edward Ricklefs, formerly with Neeley Printing Co., for the stripping and plate making work; and Richard Arden, formerly with Rayner Litho Co., for the camera class. General supervisor of the courses for the Institute is James Pattison, formerly with Master Litho Co.

The present contract with the Army extends to the end of 1955, Al Brown, general manager of the Chicago Lithographic Institute, stated.

•

Silk Screen-Litho a Good Pairing

"Marriage" of the silk screen and lithographic printing processes was discussed by John Hume, sales manager, Velvetone Corp, silk screeners, at a meeting of the San Francisco Club of Printing House Craftsmen, April 21. Because of the high cost of labor, a tendency towards "self-service" is bound to continue, and with it the desire of manufacturers and retailers to draw attention to their merchandise by means of attractive P.O.P. material, he said. Because the stores may become flooded with too many point-of-purchase displays, he felt that the printed products ordered might actually decrease in amount, but would be of much better quality.

Mr. Hume showed samples of work done in cooperation with lithographers. The increasing use of fluorescent inks has done much to create a demand for the work of silk screen printers, the speaker said, and the spotting in of fluorescents over a conventionally produced job will often add a sparkle that could not otherwise be achieved. He asserted that the lithographer and the silk screen printer would each benefit and increase their own sales as they became familiar with the work of the other, learning when to use other processes for mutual profit and for the good of the customer.

More than 100 members and guests were present for the talk and demonstration.

•

Horne NY Fund Litho Chairman

Leon H. Horne, president of L. H. Horne Printing Co., is chairman of the Lithographers division of the 1955 Greater New York Fund campaign. The announcement was made by C. C. Westland, vice president and director of the McCall Corp. and chairman of the Fund's Advertising, Printing and Publishing Group.

•

3M Gives Free Pencils

Mechanical pencils are being given away by dealers of "3M" brand presensitized photo offset plates as part of a campaign to dramatize the lithographic problem of heat and humidity.

They are being distributed in conjunction with a three-minute demonstration called "The Naked Truth," offered by offset plate dealers to show the performance of the grainless aluminum plate under high humidity conditions.

•

Geers Is Manager at Cincinnati

Harry E. Brinkman, president of Cincinnati Lithographing Co., Cincinnati, recently announced the appointment of Frank J. Geers, Jr., as general manager. He has been with the company since 1936.

Butler with Bensing Bros.

Robert J. Butler has joined Bensing Bros. & Deeney, according to an announcement by the company last month.

Mr. Butler was for five years vice president and general manager of C. O. Monk Co., Baltimore. Previously he was with the Fuchs & Lang division, Sun Chemical Corp., for 21 years in various executive capacities.

Mr. Butler started his career in the ink business with Sinclair & Valentine, where he spent four years in the New York plant.

•

Consolidated Litho Fetes Sanders

Henry Sanders, an executive foreman of Consolidated Lithographing Corp., New York, retired last month after serving the company for more than 35 years. He was presented with an inscribed gold watch by Sidney S. Levine, vice president in charge of manufacturing, at a luncheon in his honor. Other officers attending the luncheon included Ralph D. Cole, president; James L. Murphy, secretary treasurer; Walter J. Ash, vice president in charge of sales; and Marie E. Kaye, Lewis Cutler and Dorothy Schonfeld.

•

GB&W Elects Board Members

Directors elected by the shareholders at the annual meeting of Gaetjens, Berger & Wirth, Inc., Chicago, appointed the following officers for the coming year:

James J. Murray, president; Charles C. Sangwin, executive vice president; Arthur E. Murphy, vice president and secretary; Emmett E. Flaherty, vice president; and Joseph A. Marthaler, treasurer.

Mr. Murray has been in the printing ink manufacturing business for the past 25 years and has been with GB&W since 1947.

Mr. Sangwin became associated with GB&W in 1953. He entered the ink business with his father in 1936.

Arthur Murphy and Emmett Flaherty have been salesmen with GB&W since 1952.

Joseph Marthaler became office manager and general accountant of GB&W at the time the company was incorporated in Illinois.

How to get perfect line-up and register

the Craftsman Line-Up and Register Table

Only Craftsman Tables give you all these time- and money-saving features.

- two straightedges at perfect right angles
- machine cut tracks and gears
- straightedge raising and lowering lever
- sheet side guide
- sheet stops and grippers
- fluorescent lighting
- graduated stainless steel scales
- special ink marker
- 5 sizes, with working surface from 28″x39″ to 62″x84″

Greatest possible accuracy is assured if you do your line-up and register on a Craftsman Table. And in addition, you'll save time and money, because the Craftsman Table simplifies and speeds up production.

The Craftsman Line-up and Register Table is an instrument of mechanical precision. It incorporates design and construction features that are the result of over 25 years of development. For laying out original copy, making stick up sheets, lining up press sheets, registering color, etc., Craftsman Tables set accuracy standards that have no equal.

You'll find Craftsman Tables are the way to solve line-up and register problems, the way to increased profits through faster, more efficient handling of work, and the way to precision accuracy that keeps customers happy. *Send for Catalog and get all the facts.*

Craftsman® TABLES

CRAFTSMAN LINE-UP TABLE CORP.

55-G River Street · Waltham 54, Massachusetts

NEW END-OPENING CARTON KEEPS WESTON PAPERS MILL FRESH

Zip, slip, flip. It's as easy as that now that Weston Papers come packed in this new end-opening carton.

Zip a few inches of tape and the carton end swings open. *Slip* out a ream or two — whatever you need for the job in hand. *Flip* and the carton is closed. The rest of the stock stays clean, protected, *mill fresh* until you're ready to use it.

New zip-open carton, new moisture-proof wrapping, new easy to read labels . . . these are plus features that add shop conveniences to the customer-pleasing qualities of any Weston paper. Make it a habit to recommend WESTON when the call is for all rag or rag content bond, ledger or index papers.

BOND PAPERS
Extra No. 1, 100% New Rag
OLD HAMPSHIRE BOND
100% Rag Content
DEFIANCE BOND
75% Rag Content
HOLMESDALE BOND
50% Rag Content
WINCHESTER BOND
LENOX BOND
25% Rag Content
WESTON BOND
WESTON OPAQUE BOND
MERIT BOND
MERIT OPAQUE
RESEARCH BOND

LEDGERS
Extra No. 1, 100% New White Rag
BYRON WESTON CO. LINEN RECORD
100% Rag Content
DEFIANCE LEDGER
75% Rag Content
WAVERLY LEDGER
CENTENNIAL LEDGER
50% Rag Content
WINCHESTER LEDGER
LENOX LEDGER
25% Rag Content
BLACKSTONE LEDGER
COURT LINEN LEDGER

MACHINE ACCOUNTING
50% Rag Content
WESTON'S
MACHINE POSTING LEDGER
25% Rag Content
TYPACOUNT
POSTING LEDGER

INDEX BRISTOLS
100% Rag Content
DEFIANCE INDEX
VULCAN INDEX
50% Rag Content
WESTON'S MACHINE
POSTING INDEX
LENOX INDEX
WINCHESTER INDEX
25% Rag Content
TYPACOUNT INDEX
MERIT INDEX

SPECIALTIES
100% Rag Content
WESTON'S
DIPLOMA PARCHMENT
50% Rag Content
WESTON'S
FINGERPRINT INDEX
Rag Content
WESTON'S
HAND WEAVE
25% Rag Content
BY WESCO
MANUSCRIPT COVER
SUPERIOR
MANUSCRIPT COVER

BYRON WESTON COMPANY • Dalton, Massachusetts

Makers of Papers for Business Records Since 1863

THROUGH THE *Glass*

At The NALC Convention

MILWAUKEE is justly famous for its beer, and the NALC members made extensive investigations of the high quality. The ladies, in fact, were given a tour of Miller Brewing Co. Frank P. Zeidler, mayor of the city, was careful to point out that, while beer is widely associated with Milwaukee, the graphic arts, of which litho is a big part, is the third largest industry in the city — way ahead of brewing. Still, judging by the impressive array of bottles at the reception on Friday, you would think beer had the lead on the graphic arts.

ml

No convention is complete (or replete) without a Texan. NALC had G. W. McDermott, Houston delegate, defending the honor, and size, of the Lone Star State. Jack Blades, outgoing president of the association, recognized the international flavor of the convention by displaying flags of the U. S. and Canada and produced a miniature flag of Texas in deference to "Mac."

ml

A standing joke in lithography is the one involving a double meaning for the word "stripper." But Saul Markowitz, of Herald-Woodward Press Inc., Montreal, tells the true story of a young lady who answered a want ad for a stripper at his plant. In her letter she described her assets. She didn't have a letter of recommendation from LTF, maybe, but Minsky's thought she was just fine.

ml

Steve Rubenstein, partner in Colorcraft Litho, and vice president of the Philadelphia Litho Club, had big post-convention plans. He and his wife were invited by singer Eddie Fisher (a relative) to be guests at the young tenor's New York TV show, followed by dinner.

Fred Hoelperl, of the Buffalo club, fitted in well with the German atmosphere in Milwaukee. He led a very vocal threesome through all the tortuous verses of "Ist Das Nicht Ein Schnitzelbank" at the cocktail party. Kibitzers reported that their pronunciation was well-meaning, if not always accurate.

ml

In the spotlight at the convention were those handsome busts of Alois Senefelder, cast in bronze and gold, which are to be presented to past presidents of local clubs and of the national association. Sharing attention with the busts was a telegram greeting the NALC and praising the work of the graphic arts. It was signed by Dwight D. Eisenhower.

ml

Although it may never replace beer in national affection, cheese was also on display at the convention. Wedges of the finest Wisconsin variety were enjoyed at the Saturday luncheon.

ml

Herbert L. Borden, of Boston, is sold on the value of PIA Self-Advertising Competition. Herb's company, Hub Offset, has won a first, honorable mention and a second prize in three successive years with its campaign pieces. Letters of praise from as far off as Auckland, New Zealand; Manila; Tokyo; Brisbane, Australia; and Havana have commented on the company's litho work.

ml

In our attempt to give all the details of the Trenton (N. J.) *Times*' eight-color dry offset press last month (May ML, page 35) we forgot one of the most important facts: the double four-color press was built by R. Hoe & Co. back in the middle thirties.

ml

Staunch defenders of the albumen process will find comfort in this statement by M. R. Fider in the British publication Modern Lithographer: *". . . this old and simple process can now give nearly as good machine life as deep-etch plate and its use is anything but on the wane."*

Yep, this is the place!

Parish in Kansas City For R & P

Roberts & Porter, Inc. has announced the appointment of Jack Parish to the sales staff of its Kansas City branch. Mr. Parish was with Fine Arts Litho Co. for five years and served as cameraman with Topographic Co., Korea.

•

N. Y. Lithographers Incorporate

General Graphic Arts Supply Co., lithographing-printing, c/o David Kallman, 200 West 57th St., New York, has been granted charter of incorporation listing capital stock of 200 shares, no par value. Incorporators are Wanda Spiegel, Gloria Harden, and David Kallman all of New York.

Scientific Printers & Lithographers, Inc., printers, Haas & Kelberg, 10 East 43rd St., New York, has been granted charter of incorporation listing capital stock of 200 shares, no par value. Incorporators are Mary DeFrancisci, Richard L. Dorff, and Henrietta Schiffman, all of New York.

Karnet Litho Company, Inc., printing, 18 Beekman St., New York, has been granted charter of incorporation, listing capital stock of 200 shares, no par value. Directors are Israel Rubin, Eileen Gross and Gerald Beldock, all of New York.

Associated Litho Corporation, printing, c/o George Garfunkel, 130 West 42nd St., New York, has been granted charter of incorporation listing capital stock of 200 shares, no par value. Incorporators are Alexander Weiss, Milton D. Lunden, and Joel M. Weiss all of New York.

Apt Lithographic Co., lithographers, printers, etc., c/o Milton B. Newman, 32 Court Street, Brooklyn, N. Y., has been granted charter of incorporation listing capital stock of 200 shares, no par value. Directors are Helen A. Powell, Charles W. Parker and Harry L. Abrams, all of Brooklyn.

Color Promotion Corp., lithographers and printers, c/o Morris Mann, 393 East 51st Street, Brooklyn, N. Y., has been granted charter of incorporation listing capital stock of 200 shares, no par value. Directors are Patsy Prezioso, Sylvia Mann and Morris Mann, all of Brooklyn.

Scott Lithograph Corp., lithographers and printers, c/o Jos. Quittner, 36 West 44th Street, New York, has been granted charter of incorporation listing capital stock of $10,000. Directors are Lillian Hauptman, Mary F. Esposito and Irwin Goldstein.

Caption Printers & Lithographers, Inc., printers and publishers, 15 Park Row, New York, has been granted charter of incorporation listing capital stock of 200 shares, no par value. Directors are Morton Greenberg, Gerald Goldfisher and Irving Chapnick, all of New York.

David-Donicer, Ltd., lithography, 304 East 45th Street, New York, or c/o N. Dechter, 32 Broadway, New York, has been granted charter of incorporation listing capital stock of 200 shares, no par value. Directors are Jacob Rappoport, Joseph F. Graef and Herman Soloway, all of New York.

Lubar Gyde, Inc., printing, lithographing, c/o Chester A. Eessler, 551 5th Ave., New York, has been granted charter of incorporation listing capital stock of 200 shares, no par value. Directors are Teresa Macca, Selma Weitz and Regina Posner, all of New York.

North Shore Graphic Art Center, Inc., lithography and photography, 225 Varick Street, New York, has been granted charter of incorporation listing capital stock of 100 shares, no par value. Directors are Dorothy Strauss, Mark Farber and Arthur Burstein, all of New York.

A. Martin Associates, Inc., lithographers, printers, etc., c/o Marco J. Shemaria, 233 Broadway, New York, has been granted charter of incorporation listing capital stock of 200 shares, no par value. Directors are Julia Greenberger, Toby Stein and Leonard R. Davis, all of New York.

Code of Ethics in Bidding: Will it Work?

Donald S. Hutchinson, president of POPAI and vice president and sales manager of Lutz & Sheinkman, New York, outlined problems of printers and lithographers at the recent Point-of-Purchase Advertising Institute's annual symposium in Chicago. He said that speculative bidding has been a problem for a quarter of a century and that "codes of ethics" have been tried and failed because of "hungry salesmen" willing to submit costly artwork. His answer:

a) no client of point of purchase materials should ask for bids from more than three or four suppliers.

b) presentations should be limited to pencil sketches; if sales promotion managers can't visualize from a pencil drawing, they're in the wrong job.

c) when two suppliers come up with good ideas, they should submit a few color roughs until one is eliminated, then the winner can proceed toward the finished job.

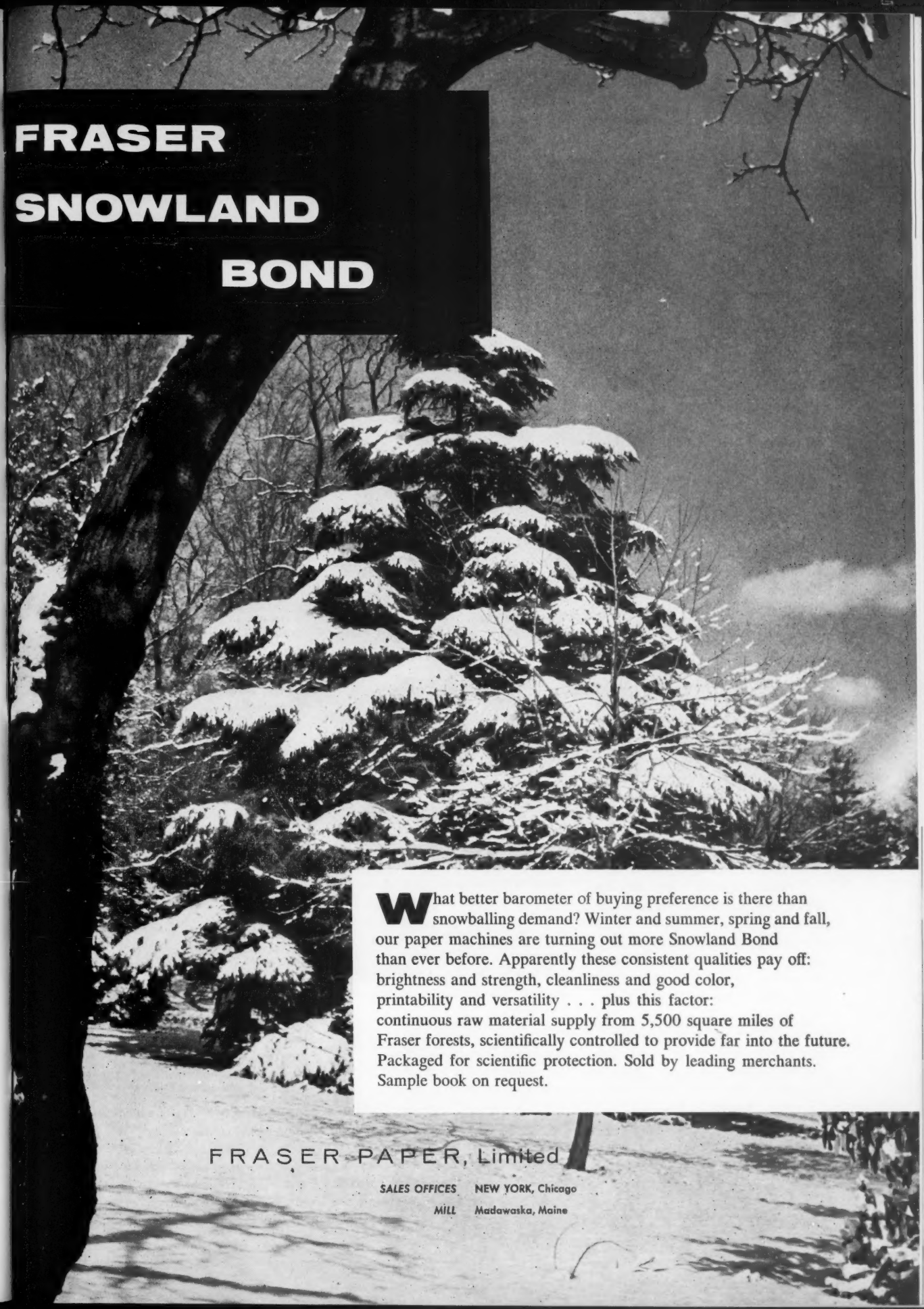
For permanent displays, speculative costs may include such costs as contact with dealers, construction of models and some complete artwork. Mr. Hutchinson warned that these costs must be eventually borne by the client.

Other speakers at the session at which 500 were present (more than 12,000 attended the three-day meeting) were: Ralph Head, merchandising executive for Batten, Barton, Durstine & Osborne; Horace Blanchard, merchandising materials manager, National Biscuit Co.; Carl Sigler, director of merchandising, Gordon Best Advertising; and other merchandising executives.

Re-elected as POPAI officers for 1955-56 were: president, Donald S. Hutchinson, vice-president of Lutz & Sheinkman, New York; first vice-president, Stanley L. Wessel, president of Stanley L. Wessel & Co., Chicago; treasurer, Harry Fenster, president of I. Fenster & Sons, Inc., New York; and chairman of the board, W. L. Stensgaard, president of W. L. Stensgaard & Associates, Inc., Chicago.

Newly elected were: second vice-president, Carl Bergmann, sales manager of Palmer Associates, New York; and western vice-president, A. J. Borne, executive vice-president of Magill Weinsheimer Co., of Chicago.

The 1956 POPAI Symposium & Exhibit will be held April 10-12, Hotel Astor, New York. Symposium chairman will be Carl Bergmann.



What better barometer of buying preference is there than snowballing demand? Winter and summer, spring and fall, our paper machines are turning out more Snowland Bond than ever before. Apparently these consistent qualities pay off: brightness and strength, cleanliness and good color, printability and versatility . . . plus this factor: continuous raw material supply from 5,500 square miles of Fraser forests, scientifically controlled to provide far into the future. Packaged for scientific protection. Sold by leading merchants. Sample book on request.

FRASER PAPER, Limited

SALES OFFICES NEW YORK, Chicago

MILL Madawaska, Maine

L. S. Rapport

E. Gurin

Master Products to Sell Blankets

The organization of Master Products Corp. in San Juan, Puerto Rico, and its sales affiliate Gurin-Rapport, Inc., Chicago, was revealed last month by Lawrence S. Rapport, chairman of the board of Gurin-Rapport and of Master Products Corp. The sales organization is headed by A. D. Kirkpatrick, Morristown, N. J. as eastern sales manager; A. W. Ballantyne, Columbus, O., central states sales manager; and Henry Zipperman, Chicago, mid-west sales manager.

Emanuel Gurin is president of Gurin-Rapport and also of Master Products Corp. The company manufactures lithographic blankets.

•

Canco Gets Safety Award

American Can Co.'s central division, Chicago, was one of 68 industrial firms which received a plaque from the Greater Chicago Safety Council for its accident reduction record during 1954. The awards were based on a comparison of the frequency and severity rates in their accident prevention experience in 1954 over 1953 results.

•

"Polygraph" of Holland in U. S.

"Graphic Imports," Los Angeles, has been established as exclusive U.S. headquarters for lithographic negatives and photo engravings of Polygraph of Haarlem, Holland. With this move made last month, Polygraph entered the U.S. market with its color process litho negatives and photo engravings, offering intercontinental overnight air delivery to Los Angeles, direct from its plant in Holland.

Eugene Singer, president of Graphic Imports said that overnight service, lower cost, and the trend toward greater use of color augur well for growth of the new office.

Chicago Institute Graduates 180

Chicago Lithographic Institute held its ninth commencement ceremonies June 1 at Glessner House with 180 graduates receiving certificates attesting to satisfactory completion of the courses. Brief talks were made by the Institute's officers, including: James S. Armitage, Inland Press, president; Harry Spohnholz of Local 4, ALA, vice president; Ernest Karge, Steelograph, Inc., treasurer; and George Benton, Meyercord Co., secretary.

Alber N. Brown, general manager of the Institute, said one of the most significant achievements this year was the participation of nearly 100 litho plant employees in the informal discussion clinics for journeymen begun last September.

Despite plans announced earlier in the year, the fall semester of the Institute will open at Glessner House next September and not in the new Local 4 headquarters building. The space leased there for the school's use will not be available before 1956.

The Institute will remain open during the summer months this year for the first time, to accommodate U.S. Air Force lithographic training groups.

•

Chemco Holds Ann. Sales Confab

Chemco Photoproducts Co. held its second annual open-forum sales conference at the Nassau Country Club, Glen Cove, L. I., April 17-22. Francis C. Powers, vice president in charge of sales, and Sam B. Anson, Jr., general sales manager, presided over the group. This meeting came at the end of the largest sales quarter in the company's history. Guest speakers were Fred A. Dirkes, president, Rolled Plate Metal Co., who discussed "Engravers Zinc and Magnesium Sales," and Lou R. Durant, ANPA Research Institute, who talked on the Dow Fast Etch process.

•

Ressinger Dies in Chicago

Paul Martin Ressinger, 64, Chicago package and products designer, died May 9 in Veterans Hospital, Chicago. Mr. Ressinger was one of the founders of the Society of Typographic Arts and was a leader in the movement to raise design standards in graphic arts.

Trade Events

Lithographers National Assn., annual convention, June 20-23, Lake Placid Club, Lake Placid, N. Y.

International Association of Printing House Craftsmen, Inc., annual convention, Aug. 7-10, Hotel Netherland Plaza, Cincinnati.

Screen Process Printing Association, International, annual convention, Sept. 10-14, Atlantic City.

National Assn. of Photo-Lithographers, annual convention and exhibits. September 21-24, Statler Hotel, Cleveland.

Canadian Lithographers' Association, annual convention, Sept. 25-28, Seigniory Club, Montebello, Quebec.

National Metal Decorators Association annual convention, Oct. 10-12, Chalfonte-Haddon Hall, Atlantic City, N. J.

Printing Industry of America, annual convention, Oct. 15-20, Atlantic City, N. J.

Litho Schools

CANADA—Ryerson Institute of Technology, School of Graphic Arts, 50 Gould St., Toronto, Ont., Canada.

CHICAGO—Chicago Lithographic Institute, Glessner House, 1800 S. Prairie Ave., Chicago 16, Ill.

CINCINNATI—Ohio Mechanics Institute, Cincinnati, Ohio.

LOS ANGELES—Los Angeles Trade Technical Junior College, 1646 S. Olive St., Los Angeles 15, Calif.

MINNEAPOLIS—Dunwoody Industrial Institute, 818 Wayzata Blvd., Minneapolis 3, Minn.

NASHVILLE—Southern School of Printing, 1514 South St., Nashville, Tenn.

NEW YORK—New York Trade School, Lithographic Department, 312 East 67 St., New York, N. Y.

OKLAHOMA—Oklahoma A & M Technical School, Graphic Arts Dept., Okmulgee, Okla.

ROCHESTER—Rochester Institute of Technology, Dept. of Publishing & Printing, 65 Plymouth Ave., South Rochester 8, N. Y.

PHILADELPHIA—Murrell Dobbins Vocational School, 22nd and Lehigh, Philadelphia, Pa.

PITTSBURGH—Carnegie Institute of Technology, Dept. of Printing Administration, Pittsburgh.

SAN FRANCISCO—City College of San Francisco, Ocean and Phelan Aves., Graphic Arts Department.

ST. LOUIS—David Ranken, Jr. School of Mechanical Trades, 4431 Finney St., St. Louis 8, Mo.

VANCOUVER—Clark College.

WEST VIRGINIA—W. Va. Institute of Technology, Montgomery, W. Va.

Trade Directory

Lithographic Tech. Foundation
Wade E. Griswold, Exec. Dir.
131 East 39 St., New York 16, N. Y.

National Association of Photo-Lithographers
Walter E. Soderstrom, Exec. V. P.
317 West 45 St., New York 36, N. Y.

Lithographers National Association
W. Floyd Maxwell, Exec. Dir.
420 Lexington Ave., New York 17, N. Y.

National Assn. of Litho Clubs
Frank H. Mortimer, Secy.
5917 33rd St., N. W.
Washington 15, D. C.

Printing Industry of America
James R. Brackett, Gen. Mgr.
719 15th St., N. W. Washington 5, D. C.

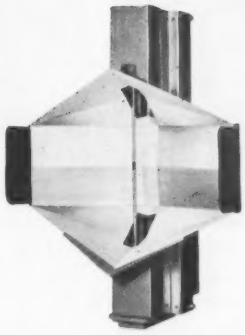
International Assn. of Printing House Craftsmen
P. E. Oldt, Exec. Sec'y.
307 E. Fourth St., Cincinnati 2.

The Strong Team

cuts plate-making exposure time in half

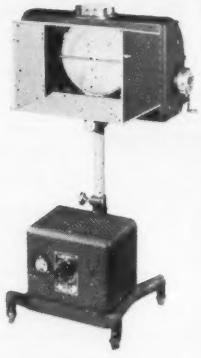
Challenger Camera Arc Lamp

Vertical trim. Burns at 75 amperes and 23 volts at the arc. Readily mounted on lamp support arms of any camera.



Grafarc 140 Ampere Printing Lamp

For use with vertical printing frames 40″ x 50″ and larger.



Grafarc 95 Ampere Printing Lamp

For use with vertical printing frames under 40″ x 50″.

Strong Grafarc Arc Lamps

FULLY AUTOMATIC • HIGH INTENSITY

- ★ **Uniform coverage of large areas.**
- ★ **Constant color temperatures.**
- ★ **Power to punch through dense Kodachromes.**
- ★ **Accurate control of densities, regardless of line voltage variations.**
- ★ **Sharper reproduction.**
- ★ **Eliminate illumination variables.**
- ★ **Eliminate dot undercutting.**

Overhead model printing lamps available for use with horizontal printing frames. Burn in normal position, avoiding smoking of reflector and preventing ash from depositing on surfaces in the light path.

Models for Monotype Huebner MH photo composing machines assure precise control of intensity for accurate repeats.

Send for free literature or arrange for a demonstration by your dealer.

THE STRONG ELECTRIC CORPORATION

17 CITY PARK AVENUE • TOLEDO 2, OHIO

Please send free literature on Strong Grafarc Lamps.

NAME_____

FIRM_____

STREET_____

CITY & STATE_____

NAME OF SUPPLIER_____

A SUBSIDIARY OF GENERAL PRECISION EQUIPMENT CORPORATION

L. A. Croplis

A. R. Bink

W. J. Taylor

W. C. Johnston

New Sales Managers for ATF

Louis A. Croplis has been appointed sales manager of the Eastern Region, American Type Founders, with headquarters in New York. Mr. Croplis has been with ATF for 28 years. He was manager of the New York branch, after having been in charge of the Cincinnati office for several years. Mr. Croplis won recognition last year as ATF's "Manager of the Year."

Arthur R. Bink is the new manager of the midwestern region, with headquarters in Chicago. Mr. Bink joined ATF in 1933. Prior to this appointment he was manager of the Atlanta branch office.

William J. Taylor has been named manager of the southern region, with headquarters in Atlanta. Mr. Taylor joined ATF in 1945, after several years experience as an equipment salesman and was recently manager of the Cleveland branch.

Willis C. Johnston has been appointed manager of the Pacific Region. Headquarters have been set up in San Francisco. Mr. Johnston has been with ATF for 25 years, recently as manager of the San Francisco branch.

Young Lithogs Sees Metal Litho

Taking their annual "day off," Young Lithographers Association of New York met May 11 for lunch at Townleys, Union, N. J., and took a tour of the American Can Co.'s Metal Litho plant at Hillside, N. J. The group has adjourned for the year until fall. A board of governors meeting will be held this month to plan next year's program.

•

NY Direct Mail Week Report

The first Direct Mail Week in New York, sponsored by the Direct Mail Advertising Association, Inc., April 18-22, Hotel Roosevelt, brought 173 persons to the Fund Raisers Workshop on the first day. Edward N. Mayer, Jr., president, James Gray, Inc. was luncheon speaker.

On Tuesday, Direct Mail Day, 877 persons heard Kenneth McFarland, Topeka, Kansas speak on "Lamp Lighters." The Second Annual Book Workshop, Jerome S. Hardy, director of advertising, Doubleday & Co., Inc. chairman, heard Milo Sutliff, president, Greystone Press, discuss "What has happened during 35 years of Mail Order Selling." The Third Annual Circulation Workshop began Thursday noon, with luncheon speaker Les Suhler, Look Magazine, giving the keynote address on "New Directions in Direct Mail." 138 persons representing an estimated combined circulation in excess of 153,000,000 attended this 2-day meeting.

•

Hearn Litho Names Douglas

John O. Douglas, Jr., was recently named manager of Hearn Lithographing, Houston, Texas. Mr. Douglas started his printing business in 1934 with a small hand press, formed the Houston Print Service, and sold this plant in 1951.

•

N.E. Graphic Arts Leader Dies

Joseph P. Donovan, 75, founder and treasurer, Donovan & Sullivan Photoengraving Co., Boston, died May 9 at his Egypt, Mass., home.

Born in Boston, Mr. Donovan was considered dean of the printing industry of Greater Boston, and one of the best-known figures in photoengraving in the country. He was former president of the New England Photoengraving Association; former president of the Boston Club of Printing House Craftsmen; a founding member of the Bookbuilders of Boston; and a charter member of the Advertising Club of Boston.

Blackwelder Named To LNA Staff

John J. Blackwelder has been appointed a staff representative of LNA, Bank Stationers' section. He will also work on extension of LNA's member services and activities in industry relations.

Mr. Blackwelder was special assistand in the public relations division in charge of 18 field offices at National Association of Manufacturers for 11 years.

His experience also includes editorial work for IBM's "Think" Magazine, housing publicity for Equitable Life Insurance Co., and publicity for Parkchester, Metropolitan Life's housing community in New York.

•

Chicago Union Settlement

Chicago Local No. 4, Amalgamated Lithographers of America, CIO, and the Chicago Lithographers Association have agreed on a two-year contract, effective May 1. The contract grants an across-the-board pay increase of $2.25 per week for one year and a similar increase of $2.25 per week effective May 1, 1956. The union had asked for a five percent across-the-board raise for one year.

Journeymen working on second and third shifts received a $1 increase, bringing the differential above day shift rates to $8 a week. Apprentices, feeders, helpers and general workers also received a $1 raise, the night differential going to $7 a week.

The Association agreed to the union demand that a legal holiday falling on a Saturday shall be legally celebrated on the preceding Friday. A request for the additional paid holidays for first shift employees and four additional paid holidays for second and third shift employees was not granted. Also turned down by the Association was a proposal for a three-week vacation after one year of employment, instead of after two years. A request for a four-week vacation for employees with 25 or more years of service with one employer was denied. The union had asked a one-year contract but agreed with employers to a 2-year pact, effective to April 30, 1957. Chicago Lithographers Association represents litho plants in Chicago and downstate.

Prominent Users of Strathmore Letterhead Papers: No. 116 of a Series

Young race horses are a symbol of spring in the thoroughbred horse raising areas of the United States. This broodmare, which has already produced a noted racer, grazes with her newest foal.

Thoroughbred QUALITY *wins!*

"Breeding the best to the best" is the policy followed by breeders of thoroughbred horses. Only by concentrating on quality can a breeder produce horses able to distinguish themselves in the rigorous competition of the turf. The American Thoroughbred Breeders Association, Inc. furnishes leadership and guidance to its large and prominent membership.

The Association also endeavors to maintain high standards in breeding and racing horses and sets an example by establishing quality procedures in every particular of its operation. Take, for example, its choice of a Strathmore letterhead paper for stationery, from a line that assures dependability and performance.

The reputation of Strathmore letterhead papers for quality makes them the choice of many of the leading organizations in the country. Their expressive character conveys an immediate feeling of integrity and reliability. Ask your supplier to show you samples and see the difference that quality makes.

STRATHMORE LETTERHEAD PAPERS: *Strathmore Parchment, Strathmore Script, Thistlemark Bond, Alexandra Brilliant, Bay Path Bond, Strathmore Writing, Strathmore Bond. Envelopes to match converted by the Old Colony Envelope Company, Westfield, Mass.*

STRATHMORE THIN PAPERS: *Strathmore Parchment Onion Skin, Strathmore Bond Onion Skin, Strathmore Bond Air Mail, Strathmore Bond Transmaster.*

STRATHMORE

MAKERS OF FINE PAPERS

Strathmore Paper Company, West Springfield, Massachusetts

Strathmore ADVERTISEMENTS

in national magazines tell your customers about the letterheads of famous American companies on Strathmore papers. This makes it easier for you to sell these papers, which you know will produce quality results.

★ ★ ★

This series appears in:

TIME

NEWSWEEK

BUSINESS WEEK

PRINTERS' INK

SALES MANAGEMENT

PURCHASING

ADVERTISING REQUIREMENTS

SAVE TIME—SAVE ROLLER COSTS

WE have all the equipment necessary for manufacturing your Dampener Rollers at our branch factories. If you are located in any one of these Cities your old rollers will be picked up, recovered and returned without any cost outside of new materials and repairs. The labor of boxing and other handling costs are eliminated. If you are an out-of-town lithographer, freight charges are reduced to the minimum.

Our new Crescent Rubber Rollers for taking and distributing ink have a perfect surface and are guaranteed against cracking or chipping. These Rollers are a new and thoroughly tested development for offset work. They have been perfected for over a year, but only marketed after that period of testing. They should be ordered from the factory nearest you.

At each of our factories listed below we have a complete line of lithographic roller supplies. Contact us and you will receive immediate service.

One Set of Good Rollers On Hand Is Worth Three On the Way

BINGHAM BROTHERS COMPANY

Roller Makers since 1826

406 PEARL ST., NEW YORK 38, N. Y.

PHILADELPHIA 1315 Race Street	BALTIMORE 1011 Curtain Ave.	ROCHESTER 980 Hudson Ave.
CAMBRIDGE 23 Harvard Street	JERSEY CITY 257 Brunswick St.	GARWOOD 648 South Ave.

Service Branches: *Equipped and stocked for immediate delivery with all popular press rollers.*

SPRINGFIELD 123 Kerry Drive	NEW HAVEN 8 Center Street

MACHINE-CAST PRINTERS' ROLLERS SINCE 1826

MEMBER HUNDRED YEAR ASSOCIATION

Litho Club NEWS

New York

Club Has 300 at Ladies' Nite

"Just plain fun," said Don Rovegno, New York Litho Club president in a preview of the Club's Ladies Nite, May 14. The party, however, was far from plain. Held at the Biltmore Hotel, nearly 300 members and their ladies took cocktails at a reception in the Fountain Court. Gifts of bracelets, earrings, and necklaces were presented to the ladies in the foyer preceding dinner in the grand ballroom. Strolling musicians provided a background of show tunes and favorite waltzes for guests both at the reception and during dinner. Jeno Bartal's nine piece orchestra played for dancing. Bud Krebs and his wife (he is president of Washington Litho Club) joined an orchestra-side table with other New York Club officers and wives.

More than 25 door prizes, all donated by suppliers, were distributed to those ladies holding ticket stubs matching the lucky numbers drawn from a revolving wooden cage.

Arthur Tarling was chairman of the entertainment committee, with William Glover, Jacques Tisne, and Angelo Pustorino assisting.

Time, Inc. Research Reviewed

New York Litho Club members at their April 27 meeting, heard Ted Dadisman, Printing Developments, Inc., discuss the results of spending over $3 million for research on the plate and scanner program. Time's confidence in the program was reinforced by a vote of reassurance given Printing Developments at the start of this year, according to Mr. Dadisman. He said that these developments were "premium" products limited to a relatively few prospective customers at this time.

The project at the Springdale Laboratories the past four years has been to improve the printing of *Time* and *Life* magazines, he continued, citing the plastic plate program. The first large scale run will be made with these plastic plates next October in Chicago. New contributions in the field of dry offset will be forthcoming in the near future. *Time* magazine is run rotary offset in the foreign editions, in Tokyo, Havana, Paris.

New members welcomed at the meeting were: James Shilhan and Nathan Rosen.

Cincinnati

McGhee, Johnson Speakers in May

Cincinnati Litho Club members heard James E. McGhee, Eastman Kodak Co., and Cliff Johnson, Printing Developments, Inc., discuss films and cameras, and multi-metal plates,

New York Litho Club's Ladies' Nite brought board of governors' and officers' wives to the Hotel Biltmore for cocktails, dinner and dancing. Standing (l. to r.) are: Mrs. Pustorino, Mrs. Rovegno, Mrs. Tarling, Mrs. Kennedy, and Mrs. Stattel. Seated (l. to r.) are: Miss Scott, Mrs. Watson, Mrs. Coleman and Mrs. Rauscher.

Visiting dignitaries included Washington Litho Club president Bud Krebs and his wife (on right). Don Rovegno, New York Litho Club president, and his wife accompanied the capitol city couple to the ballroom.

Board of Governors at the annual dinner-dance - entertainment event are: standing (l. to r.), Tom Cavallaro, Foster Coleman, Art Tarling, Don Rovegno, Dan Ford, and Lou Happ. Seated (l. to r.), Joe Rauscher, Angelo Pustorino, Robert Watson, and Walter Kennedy.

LITHO CLUB GUIDE

BALTIMORE
Norwood A. Heselbach, Secy.
Interchemical Corp.
720 East Pratt St., Baltimore 2, Md.

BOSTON
Thomas J. Cain, Secy.
Hub Offset Co.
175 Purchase St., Boston 10

BUFFALO
Vic Reisch, Secy.
33 Eiseman Ave., Kenmore 17, N. Y.

CANTON, Ohio
Jack R. Reinart, Secy.
1512 Maryland Ave., S.W., Canton

CHICAGO
Fred L. Faulkner, Secy.
Chief Printing Co.

CINCINNATI
Peter Schannes, Secy.
Mail-Way Advertising Co.
229 East Sixth St.
Cincinnati 2, Ohio

CLEVELAND
Milton Cornman, Secy.
IPI
1325 W. 73 St., Cleveland 2

CONNECTICUT VALLEY
Charles H. Waterhouse, Secy.
27 Van Ness St., Springfield, Mass.

DALLAS
L. J. Reynolds
6306 Latta St., Dallas, Texas

DAYTON
Richard Clark, Secy.
740 Vine St., Piqua, O.

DETROIT
John Murphy, Secy.
13110 Santa Rosa, Detroit

HOUSTON
D. Burton Pitts, Secy.
61 Riesner, Houston, Texas

MILWAUKEE
Allan N. Williams, Secy.
4463 N. Morris Blvd., Milwaukee 11, Wis.

NEW YORK
Tom Cavallero
Schlegel Litho. Corp.
2nd Ave. & 22nd St., New York
Meets 4th Wednesday, Building Trades Club

ONTARIO
Harold E. Swift, Secy.
179 Bartley Drive, Toronto 16, Ontario, Canada

PHILADELPHIA
Joseph Winterburg, Secy.
622 Race Street, Philadelphia 6
Meets 4th Monday, Poor Richard Club

QUEBEC
John Martin, Secy.
Gazette Printing Co., Ltd.
1000 St. Antoine St., Montreal, Canada

ROCHESTER
Roy Bippes, Secy.
Box 401, 87 Pleasant Ave., Pt. Pleasant, N. Y.

ST. LOUIS
Walter Blattenberger, Secy.
1310 South Spring St., St. Louis 10, Mo.

TWIN CITY
Paul Rudin, Secy.
Brown & Bigelow
Quality Park, St. Paul 4

WASHINGTON
H. Thos. Driver, Secy.
PO Box 952, Benj. Franklin Sta.
Washington, D. C.
Meets 4th Tuesday

NAT'L ASS'N OF LITHO CLUBS
Frank Mortimer, Exec. Secy.
Govt. Printing Office, Washington, D. C.

respectively, at their dinner meeting, May 10, Hotel Alms.

Russell Smith, Tri-State Offset Co., general chairman for the annual moonlight boatride on the Ohio River, June 4, reported high advance reservations for the event. Two new members welcomed at the meeting are Roy Wadsworth, Hennegan Co., and Frank Lacker, Lacker and Sons.

St. Louis

Boat Ride This Month

St. Louis Litho Club held its regular monthly meeting May 5 and took in two new members and one by transfer. They are: James Kavanaugh, assistant superintendent, Year Book division, Western Printing & Litho Co.; Ralph Hoemann, foreman, offset dept., Concordia Publishing House; and R. J. Richards by transfer from the Rochester Club. Mr. Richards is a former professor of Rochester Institute of Technology and is now in charge of Litho Research in the Year Book division, Western Printing & Litho Co.

Members made final arrangements for the Club's annual Boat Ride on the Mississippi on the Steamer *Admiral*, June 23.

The June 2 meeting will be open to guests. A representative of Harris-Seybold Co., Cleveland, will be guest speaker. The meeting will be held at the York Hotel.

Conn. Valley

Bruno Reviews Litho Milestones

Ten years of solid progress in the lithographic industry have put the lithographer's finished product not only on a par with his competitors in the production of printed material but have allowed him to excel, Connecticut Litho Club members were told by Mike Bruno, research manager of LTF. Speaking at the May 6 meeting, Mr. Bruno reviewed the last decade of advancements, listing bimetallic plates, photo-typesetting, new lenses from Goerz and Kodak Ektar, motor-driven arc lamps, light integrators, new contact printing lamps developed by LTF, Kodak three-color process, contact screens, Cronak and Brunak metal surface treatments, introduction of new lacquers, LTF sensitivity guide, presensitized plates and many others.

More than sixty members had dinner at the Hotel Bond, Hartford, and another 20 joined the audience for Mr. Bruno's talk.

Walter Dulak, serving as master of ceremonies for the evening in place of Frank Holloway, president, who was attending the NALC convention in Milwaukee, said that the annual clam-bake will be held at Turner Park, Longmeadow, Mass., on August 20.

Houston

Poster Production Told in Film

Houston Litho Club members were led throughout the intriguing details of making a 24-sheet poster by way of watching a film from McCandlish Lithographing Corp., Philadelphia at their meeting May 3. The story of the production began with the first rough draft of a sketch by the creative artist and ended with the posting of the completed poster on the outdoor advertising panels.

Two new members of the Club are: Syd Wagnorne, Clampitt Paper Co.; and Frank L. Pryor Jr., National Printing Ink Corp.

Members enjoyed the Club picnic May 21 at White Oak Gun Club. On the day's agenda was a barbecue, bingo games, soft ball and dancing.

The Club changed their fiscal year to coincide with the calendar year and reelected the present officers for the six month period ending Dec. 31.

Baltimore

Club Scores With Baseball Talk

Dispensing with the usual shop talks and technical discussions, Baltimore Litho Club in its final meeting until fall heard Herbert Armstrong, business manager, Baltimore Baseball Club, Inc. at the May 16 dinner meeting. Mr. Armstrong showed a film, "The Baltimore Story," a review of last year's baseball club.

Approved for membership at the April board of governors meeting were: Neal Bowden, Bowden Graphic Arts Supply; and Albert M. Palewick, Crown Cork and Seal Co.

Lithographic Technical Foundation staff members who participated in the forum.

Part of the audience of more than 700 lithographers who attended the sessions.

Members of the Twin Cities committee which arranged the technical forum.

Twin City

Sponsors LTF Forum

THE LTF showed more than 700 lithographers of the twin cities what's new in offset techniques at a technical forum April 29 and 30 in the Curtis Hotel, Minneapolis. Officers of the Twin City Litho Club reported that the two-day session was the most successful technical program ever held in the area.

Three groups cooperated to produce the program: the Litho Club, Printing Industries of the Twin Cities and Amalgamated Lithographers Association, Local No. 10. Most litho shops in the two cities closed at noon April 29 to enable shop men to attend the program.

Closed Circuit TV

The actual demonstrations took place at the Dunwoody Institute in Minneapolis and were televised by station WTCN-TV on a closed circuit. At the Curtis Hotel, groups of 40 to 50 men viewed the demonstration on 24″ TV sets.

Lithographic Technical Foundation men participating in the program included Michael Bruno, Dr. Robert F. Reed, C. H. Borchers, George Jorgenson, Edward Brody, Edward Martin and John White.

The Twin City committee included H. Werner, H. M. Smyth, and H. Smith from the litho club; Edward Donahue and Robert Wybest, from AMA; and Fon Heavers, Henry Waldeland, Herman Goebel and Axel Lundgren.

Topics discussed were paper testing, contact printing lamps, surface platemaking, ungrained deep-etch plates, bi-metal plates, standardization instruments, handling plates on the press and press washup.★

Edward Donahue, president of Local No. 10, AMA (l.); I. S. Preston, Bureau of Engraving, Minneapolis; M. J. Grayson, international vice president of AMA; and Mike Bruno discuss the forum.

Dr. R. F. Reed (lower, left) talks on paper moisture.

Mike Bruno (l.), Herman Goebel, Dr. Frank Irleand and Dr. Reed compare notes on the success of the meeting.

Mike Bruno and Ed Martin (lower, center) develop plate.

Charles Erickson (l.), chats with Axel Lundgren, president of Twin City club.

George Jorgenson (lower, right) considers small bulbs.

Amazing New PEN Does 6 GRAPHIC ARTS JOBS!

"SPEED-O-GRAPH"
non-clogging Graphic Arts
FOUNTAIN PEN

3 SIZES
FINE • MEDIUM • BROAD
Only **$3.95** POSTPAID
SATISFACTION GUARANTEED
or your money refunded!

Saves Valuable Time on all these operations:

- OUTLINING
- MASKING
- RETOUCHING
- OPAQUING
- MARKING
- RULING

MAKES CLEAN, EVEN-WIDTH LINES on any surface:

Glass, Acetate, Metal, Celluloid, Vinyl, Glossy Photos, Negatives, Paper.

THE ONLY AUTOMATIC PEN on the market that uses:

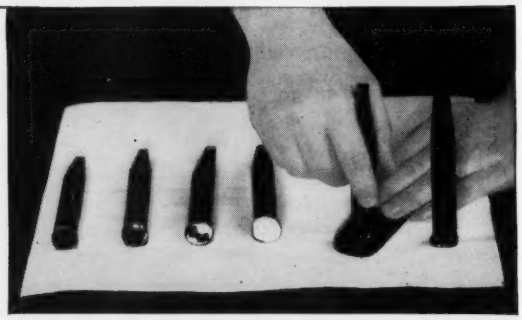
Opaque Inks • India Ink • Masking Ink • Retouching Solution — and other Heavy Fluids

SPEED dozens of art jobs with this versatile, automatic-feed pen — specially designed for precision Graphic Arts work. Long-lasting ink supply saves refilling . . . eliminates time-consuming brush work. Gives smooth, perfectly controlled flow WITHOUT CLOGGING.

ORDER NOW — Specify point width. Send check with order, or references for open account. Satisfaction guaranteed.

GENERAL PLATE MAKERS SUPPLY CO.
5441 N. Kedzie Ave. Ph. IN 3-2411 Chicago 25, Ill.

"Laboratory in a box" pre-tests printing papers



You don't have to wait until a job is on the press to check the quality of the paper. DENNISON STANDARD PAPER TESTING WAXES help cut down costly errors and delays by evaluating the surface strength of the sheet *in advance*. This compact kit gives you all you need to evaluate the degree of sizing, the liability to pick, and the type of failure characteristic of the sheet.

DENNISON STANDARD PAPER TESTING WAXES are prepared under technical supervision with rigid standards of accuracy to insure dependable testing. The complete set contains eighteen sticks of waxes with all accessories. The coated paper series contains twelve sticks plus accessories.

The cost of a complete set of DENNISON STANDARD PAPER WAXES is $30.00, Coated Paper Series (Waxes 3A to 14A) costs $24.00. Refill supplies are always available. Instructions included in each kit. Testing method approved by the Technical Association of The Pulp and Paper Industry as Standard Method T459m-48.

Dennison
MANUFACTURING CO., DEPT. ML,
Framingham, Mass.

PLEASE SEND ☐ Free pamphlet with more information.

☐ One complete set of Dennison PAPER TESTING WAXES. Check for $30.00 enclosed.

☐ Coated paper series (12 sticks). Check for $24.00 enclosed.

Name.....

Firm.....

Street.....

City ..... Zone .... State .....

Mike Bruno (r.) LTF, speaker at Boston Litho Club's May 11 meeting, enlists help from George Nicholaides, Acme Printing Co., Everett, Mass. in adjusting slide projector for his discussion.

Boston

Club Hears "What's New"

The Embassy Room, Hotel Kenmore, Boston, taxed its resources to accommodate an overflow crowd of Boston Litho Club members and guests, May 11. A group of registrants from both the TAGA and Research and Engineering Council conventions held two blocks away at the Somerset Hotel swelled attendance to 88 at this last meeting of the year. "What's New in Lithography" was the topic of Mike Bruno's (LTF) talk illustrated with slides.

George Nicholaides, Acme Printing Co., Everett, Mass., outgoing president, announced the following new officers for next year: James Beldotti, Rand Avery - Gordon Taylor Co., president; Albert Richards, Recording and Statistical Corp., first vice president; Albert Smith, Smith and Welch Co., second vice president; and Thomas J. Cain, Hub Offset, secretary treasurer.

Date and place of the annual summer outing have not been settled, but an announcement will be forthcoming after the board of governors meeting, June 1, Mr. Cain said.

Dallas

Accurate of Texas Show Plant

Dallas Litho Club members at the May 3 meeting met at the Accurate of Texas plant for demonstration of finishing operations and a tour. Larry Sigler, speaker from Accurate, discussed mounting, finishing, die-making, die-cutting, edge-gumming, Kleen-Stik application, and showed these operations to the group on the tour.

Washington

J & D Exec Speaks

Litho Club members of Washington, D. S. heard Willard E. Brown, Judd & Detweiler, Inc., speak on "Offset-Printing or a Substitute Process?" at the regular monthly meeting, May 24.

Mr. Brown, assistant vice president of J & D, was production manager of the company from 1934 to 1942. During the War he purchased printing for the Army and was in charge of a large offset plant in Rheims, France.

New members elected by the board

(*Continued on Page* 129)

Announcing

ARGO®

A new series of *Synthetic* Polysaccharides

Polyose

Adhesive and Gum-like Properties

Cold Water-Dispersible

Wide Fluidity Range

High Clarity

Non-gelling

Low in Cost

Suggested Uses—

as adhesive for gluing, remoistening, and mucilage formulations;

as extenders for more expensive water-soluble gums such as polyvinyl alcohol;

as replacements for gum arabic in pastes and for pigment suspension and binding applications;

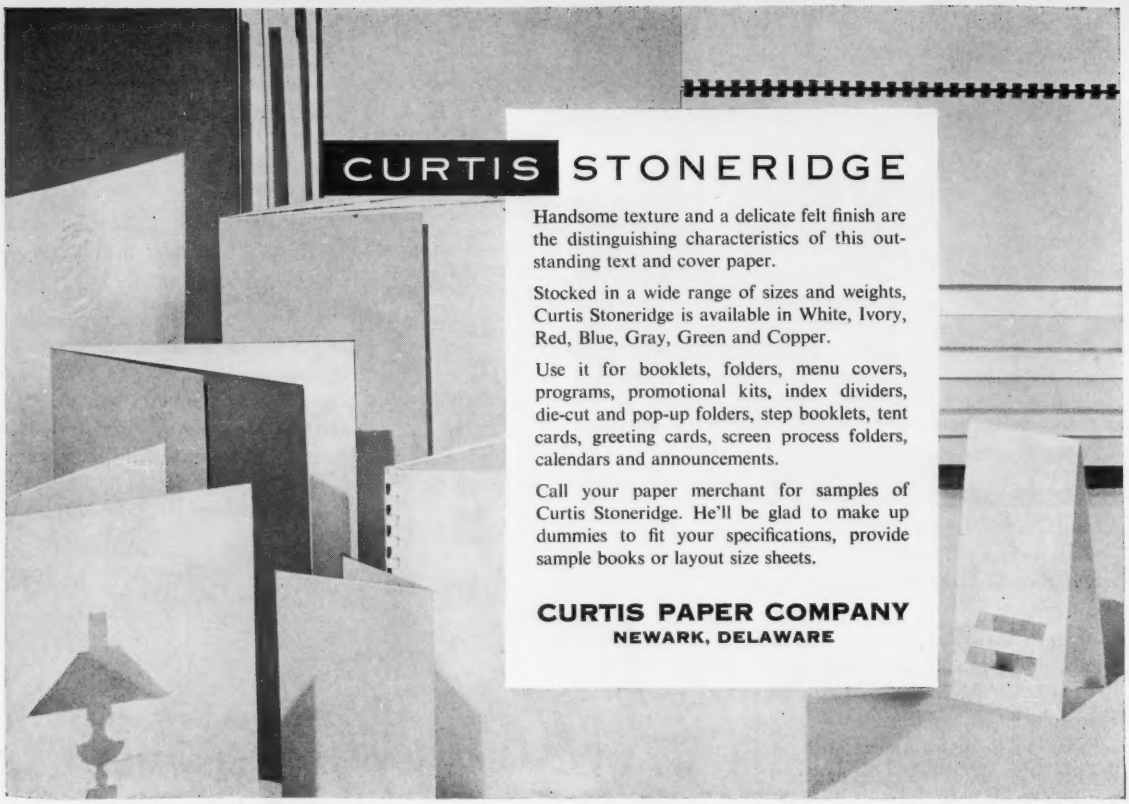
as fluidifying agents for dextrins and starches.

Address Inquiries to Department D

Chemical Division

Corn Products Refining Company

17 BATTERY PLACE, NEW YORK 4, N.Y.


CURTIS STONERIDGE
Handsome texture and a delicate felt finish are the distinguishing characteristics of this outstanding text and cover paper.
Stocked in a wide range of sizes and weights, Curtis Stoneridge is available in White, Ivory, Red, Blue, Gray, Green and Copper.
Use it for booklets, folders, menu covers, programs, promotional kits, index dividers, die-cut and pop-up folders, step booklets, tent cards, greeting cards, screen process folders, calendars and announcements.
Call your paper merchant for samples of Curtis Stoneridge. He'll be glad to make up dummies to fit your specifications, provide sample books or layout size sheets.
CURTIS PAPER COMPANY
NEWARK, DELAWARE

"Makers of Fine Offset Plates"

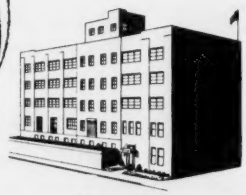
FULL COLOR • BLACK AND WHITE

Graphic Arts Corporation of Ohio

110 OTTAWA STREET • TOLEDO 4, OHIO

Our thirty years' experience in color and black and white work assures you of printing plates worthy of award.

Skilled craftsmen excelling in the preparation of advertising art, commercial photography, offset press plates (all types), photoengraved and rotogravure plates combine to afford you a most complete service.



Detroit Plant
825 West Elizbaeth St.
Detroit 1, Mich.

New York Office
122 East 42nd St., Room 419
New York 17, New York

Chicago Office
222 West Adams St., Room 429
Chicago 6, Ill.

NEW SUBSCRIPTION ORDER

MODERN LITHOGRAPHY

☐ 2 YEARS FOR $5* OR ☐ 1 YEAR FOR $3*

Company_____

Name_____

Address_____

City_____

Postal Zone State

Subscription Address_____
(If different from above)

*Above rates are for U. S. and U. S. possessions ONLY.

CANADA: $4 ☐ 1 year; $7 ☐ 2 years (payable in Canadian or U. S. funds)
LATIN AMERICA $4 ☐ 1 year $7 ☐ 2 years
OTHER COUNTRIES: $9 ☐ 1 year $15 ☐ 2 years

Please check only ONE main classification below

☐ 1. Offset and direct lithographing plants.
- ☐ Subscription in company name
- ☐ Owners and managing officers
- ☐ Superintendents, foremen, etc.
- ☐ Other Lithographic employees

☐ 2. Letterpress printing plants and employees.

☐ 3. Manufacturers, jobbers or dealers of lithographic equipment and supplies, and employees.

☐ 4. Libraries, colleges, schools and trade associations.

☐ 5. Miscellaneous — including:
- ☐ Photo-engravers and Offset Plate Makers not included above.
- ☐ Artists and consultants
- ☐ Advertising managers and buyers of printing not included above.

☐ Others .....

.....

FIRST CLASS
PERMIT NO. 80
(Sec. 34.9, P. L. & R.)
CALDWELL, N. J.

BUSINESS REPLY CARD
No Postage Stamp Necessary if Mailed in the United States

3c - POSTAGE WILL BE PAID BY —

MODERN LITHOGRAPHY

P. O. BOX 31

CALDWELL, N. J.

FIRST CLASS
PERMIT NO. 80
(Sec. 34.9, P. L. & R.)
CALDWELL, N. J.

BUSINESS REPLY CARD
No Postage Stamp Necessary if Mailed in the United States

3c - POSTAGE WILL BE PAID BY —

MODERN LITHOGRAPHY

P. O. BOX 31

CALDWELL, N. J.

NOTICE TO PUBLISHER OF CHANGE OF ADDRESS

Please change the address for my copies of
MODERN LITHOGRAPHY

FROM _____
(Street Number, Apt. Number, P. O. Box Number or RFD Number)

_____
(City) (Zone Number) (State)

_____
(Show any numbers or dates included in address or copies for identification)

TO _____
(New Address—Street and No., Apt. No., P. O. Box No., or RFD Number)

_____
(City) (Zone Number) (State)

NAME _____ Date _____
(As it appears on your magazine)

4-55

of governors at the April meeting are: Kenneth G. Rhodes, Navy Hydrographic Office; and James Sutphin, Braden Sutphin Ink Co.

Chicago

"Summer Troubles" Reviewed

Chicago Litho Club heard a panel discussion of "Summer Troubles" at the final educational meeting this year at Toffenetti's restaurant May 26. Speakers included Michael Bruno, research manager, Lithographic Technical Foundation, who talked on "Plate Troubles"; Frank Preucil, Chicago Rotoprint Co., "Color"; Wm. Bureau, Butler Paper Co., "Paper"; and Dr. K. Fox, Rapid Roller Co., "Rollers and Blankets."

Educational meetings will resume in September, Club president Rae Goss, Inland Lithograph Co., announced. The annual golf meet is to be held Aug. 20 at Midwest Country Club. The committee is headed by James Ludford, Chicago Litho Plate Graining Co.

Cleveland

Panel Has 197 Years Experience

Cleveland Litho Club at its April 28 meeting, had the benefit of 197 years combined experience in lithography from a discussion panel composed of: Al Braun, Copifyer Corp., cameras; Paul Meunier, R. E. May Co., stripping; Doc Fletcher, Copifyer Corp., platemaking; Nelson Reese, Continental Litho Co., color correction; Tom Wurm, Continental Litho Co., presses; and Henry Swain, Copifyer Corp., presses. Herbert Leedy, president of Aides, Inc., was moderator.

New members voted into the Club at the May board of governors meeting are: Samuel R. Condosta, Jr., Diamond Printing Machinery Co.; Raymond W. Mulcahy, Harris-Seybold Co.; and James H. Sutphin, Braden Sutphin Ink Co.

Speaker at the May meeting was Mr. Kaplan, Mead Paper Co., talking on "News Items of the Paper Industry for Lithography."

A "Behind the Fence" baseball party is being planned for July 1.

Philadelphia

PDI Program Discussed

Nearly 100 members of the Philadelphia Litho Club heard about the activities of Printing Developments Inc. in general, and the P.D.I. bimetal plates in particular at the last spring meeting of the organization in the Poor Richard Club May 23.

President J. Leonard Starkey adjourned the club until the Sept. 10 outing after the group heard talks by Robert Brunhouse, John Spafford and Clifford Johnson of P.D.I. They told how Time, Inc. formed P.D.I. in 1944 to facilitate the marketing of products developed by its research organization. Mr. Johnson narrated a film which discussed the Lithure and Lithengrave bi-metal plates. Joseph J. Fidure and Samuel P. Savaso, both of Container Corp. of America, were welcomed as new members. Joseph Hickey is chairman of the outing, which is scheduled to be held at Valley Forge Country Club.

"Give me NATIONAL carbons
TRADE-MARK
every time for true, white light."

Roy J. Wadsworth
The Hennegan Company
Cincinnati 2, Ohio

The term "National" is a registered trade-mark of Union Carbide and Carbon Corporation

NATIONAL CARBON COMPANY
A Division of Union Carbide and Carbon Corporation
30 East 42nd Street, New York 17, N. Y.
Sales Offices: Atlanta, Chicago, Dallas, Kansas City, Los Angeles, New York, Pittsburgh, San Francisco
In Canada: Union Carbide Canada Limited, Toronto

Equipment

SUPPLIES, BULLETINS

All-New ATF "Super Chief" Press

A completely new offset press in 29 inch size range called ATF "Super Chief" was introduced to the field last month by American Type Founders, Inc. The new high speed press retains the advantages of easy feeder setting, excellent sheet control and inking for fine work, and compactness for easy operation, in this size range. The unit handles sheets up to 22½ x 30. Volume production has begun at the main plant in Elizabeth, N. J., the company said.

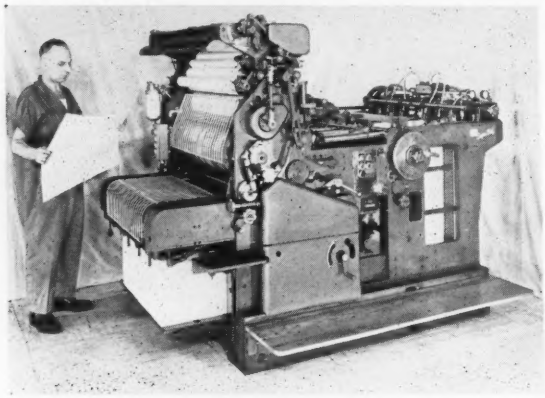
The success of test units operating in the field for the past year, in production in regular commercial shops convinced ATF management that the press was ready for the field.

The new Super Chief, styled by Donald Desk Associates, has a modern grey finish, with all operating controls prominent and painted in bright red and green. Chromium trimmings and compact design enhance the appearance.

Spokesmen said that all operations can be performed on the new press by one man, without assistance. The press offers both sheet and stream feeding. The new type Dexter Feeder can quickly set to the method best suited to the job. The three point register system has four headstops, two pull guides, four slow downs and two sets of absence detectors — one for stream feed, one for sheet feed. The pull guide on the Super Chief was developed to provide close register at high speed for a broad range of stocks — from 9 lb. onionskin to .030" board. An exclusive cushioned speed change mechanism has been developed to maintain accurate register on the job.

The inking system is an improved version of the unit used on the ATF Big Chief 29. There are 19 rollers, including 4 form rollers. All steel rollers are copper plated, for greater pick up of ink.

Plate change on the Super Chief is simplified, the company said. A quoin type lock-up on each plate bar allows quick, plate attachment; plate cylinder undercut of .030 inch accommodates dry offset plates. A special impression control adjustment is calibrated in thousandths; the operator sets this adjustment according to the caliper of the stock he's running. Another feature is the special blanket cylinder lock, which holds the cylinder still so that the pressman can exert all the pressure needed to tighten the blanket.



New press in the 29 inch size now in production at ATF's Elizabeth, N. J. plant was introduced to the lithograph industry last month. Called the "Super Chief," the press has had one year of field tests. ATF will continue to make the Big Chief 29, the company said.

•

Harriman Shows New Line

The "Philips" group of hanging files and file cases has been introduced recently by Harriman Chair Manufacturing Co., Harriman, Tenn. The line includes plywood cases covered with vinyl plastic leatherette in gray, green, maroon, and tan, in file sizes from 10 x 18" to 22 x 22½".

•

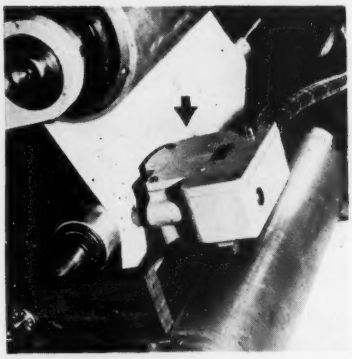
New Fotosetter Type Faces

Intertype Corp. has recently issued a series of colorful folders showing seven popular type faces available for the Fotosetter photographic typesetting machine. Printed by two and three-color offset, the four-page folders contain specimens of Baskerville, Bodoni, Cairo, Catalina, Century, Futura and Garamond.

Designed by Edwin W. Shaar, Intertype art director, the folders show the letter-by-letter exposure system, negative Fotomat character image, type enlargements and reversals, kerning letter method and other features. The Catalina folder shows a unique justification feature of the brush-script face. Representative copy blocks in each folder describe the design features of each type face with brief suggestions for their use. All composition was set on film on the Fotosetter for printing by offset.

Registron Bulletin Out

A new four-page leaflet on Champlain Co.'s photoelectric Registron describing refinements on the equip-



ment was released last month. A wiring diagram plus full illustrations of the web scanner, phase detector, and control unit are included. Two basic models of the Registron are available; the advanced model approaching complete automation with remote control, master control panel and two-speed motor. Copies of the bulletin are available from Champlain Co., 88 Llewellyn Ave., Bloomfield, N. J.

•

True Color Process Guide

Krug Litho Art Co., Kansas City, Mo., have just released the "True Color Process Guide," in a two-volume book. The guide reproduces, both on coated and offset stock, more than 18,000 color squares showing "true color" reproductions of all possible colors attainable with the four process inks.

Once the color to be reproduced is matched with the color in the guide, the reproduction of that color once or a thousand times is an absolute certainty because the color values of each square are given, the company said. Any color within the range of the color process may be reproduced accurately by using the four basic colors.

•

'Kodak Books and Guides' Revised

A newly revised edition of "Kodak Books and Guides," describing Eastman publications on general and specific photographic subjects for amateur and professional photographers, is now available from Eastman Kodak Co. Sales Service Dept., Rochester, N. Y.

Included are descriptions of the Kodak Reference Handbook on black-and-white photography, and color graphic arts, industrial and professional photography handbooks.

Listings are also made of the pocket-size Kodaguides, wallchart-size Dataguides, pocket-size Photoguides, and of special exposure aids such as the Kodak Projection Print Scale and the Kodak Color Separation Guides.

The book was done offset, 2-color.

Laced Ends Double-strength Now

Roberts & Porter, Inc., Chicago and New York, are expanding production of double-strength laced ends on dampener roller covers to give customers this feature on all their roller covers. No increase in cost over regular roller covers was posted. The company said that the double-strength laced ends are available on all dampener covers except those in the duplicating field.

Announcement was made after the recent sales conference in Chicago.

ROGERS puts the "SOLVE" in Solvents

ROGERSOLvents Solve Wash-up Problems

There is a ROGERSOL product for every one of your solvent requirements—type, rollers, blankets, plates, press—and each is guaranteed for high quality and dependable performance. What do YOU need now?

ROGERSOL UB-105

New type wash removes dry ink. Leaves no greasy film! Also cleans plastic, metal or rubber plates — without damage. 1050 flash point. Safe. Non-toxic.

ROGERSOL N.F.

Popular dry ink remover for type and rollers—works instantly and safely without harm to plates or rollers. Absolutely non-inflammable —contains no carbon tetrachloride. Carries UL seal.

ROGERSOL REGULAR

Powerful low-flash dry ink remover and roller wash that gives finest results for lowest expenditure! Safe to hands, rollers, etc.

ROGERSOL N.F. No. 9

The dry ink remover with exceptionally high flash and toxicity control. Removes any dried ink instantly and safely. Harmless to hands and rollers.

Underwriters' Seal of Approval

S.O.

Lowest priced high flash cleaner on the market

FREE SAMPLES: Test these products for yourself. Send for generous FREE samples today!

DEALERS: Write for interesting proposition

HARRY H. ROGERS COMPANY

5331 S. CICERO AVE. CHICAGO 32, ILL.

Phone: REliance 5-5100

Okay with corrections. All we need now is a coupon. H.R.

HOW'S THIS S.H.

Harry H. Rogers Company
5331 S. CICERO AVE. CHICAGO 32, ILL.
Please Send Free Samples of:

☐ ROGERSOL UB-105 ☐ ROGERSOL N.F.
☐ ROGERSOL REGULAR ☐ ROGERSOL N.F. No. 9

FIRM _____
INDIVIDUAL & TITLE _____
COMPLETE ADDRESS _____

FALPACO adds brilliance to these effective car cards

These car cards are part of a series of striking full color cards designed by Kiesewetter, Baker, Hagedorn and Smith, Inc., and were produced offset lithography by Industrial Lithograph Co. of Brooklyn, N. Y. on Falpaco special coating for offset.

Again Falpaco was chosen to be sure the appetizing color illustrations were given the best possible presentation.

Distributed by authorized paper merchants from coast to coast

FALULAH PAPER COMPANY

New York Office — 500 Fifth Avenue, New York 36 • Mills: Fitchburg, Mass.

FALPACO

WE HAVE NO QUARREL WITH THOSE WHO SELL FOR LESS—

THEY KNOW WHAT THEIR STUFF IS WORTH!

THE FINEST IN THE LAND

AGSC

AMERICAN GRADED SAND COMPANY
Chicago 13, Illinois Paterson 4, New Jersey

Offset Plate Made in One Minute

Low-cost, offset printing plates for office-type duplicators can be produced in one minute by a new method announced by Eastman Kodak Co. By using a new type direct-image paper plate in place of the copy paper ordinarily used in the Kodak Verifax Copier, a master is produced which can be placed on an offset duplicator for printing hundreds of copies. The operation is carried out under normal room illumination. Even printed pictures from coarse-screen newspaper clips may be reproduced, the company said.

A paper plate suitable for use with the new method is now on the market and The Polychrome Corp., Yonkers, N. Y., has announced the Polychrome V-Kote plate and V-Kote etch, a special solution which replaces the etch ordinarily used to prepare plates for offset duplicating.

An accessory unit for convenience in rolling the plate into contact with the Verifax matrix will be made available by Kodak at a later date.

Total materials cost for producing a plate by the Verifax method is only 18 cents, according to Kodak.

•

Mead Report Is Offset

The annual report (1954) to stockholders of The Mead Corp. was done completely by offset. The front cover, showing a forester inspecting timberland and a fire lookout tower in the woodlands on the back is four-color, while the 36-page body is done in two colors. The report showed earnings per common share to be $4.62 in 1954 compared to $4.41 in 1953.

•

R & P To Sell Lanston Products

Lanston Monotype Corp. and Roberts & Porter, Inc. have announced that Roberts & Porter will be national sales agents and distributors of all photo-mechanical and plate-making equipment manufactured by Lanston for lithography, gravure, photo-engraving and related graphic arts processes.

Harry Grandt, vice president in charge of sales for R & P said: "This appointment marks the first major step of Robert & Porter into photo-engraving and gravure.

Seybold **Saber** power paper cutters just announced by Harris-Seybold Co., are available in nine models of three sizes — 41", 47" and 54". Shown is the 41" auto-spacer model.

Harris Shows 9 New Cutters

A new line of Seybold power paper cutters with nine models in the new sizes of 41", 47" and 54", has been announced by Ren R. Perry, vice president of sales for Harris-Seybold Co.

"The single most important feature of the *Saber* line is the ability of these new cutters to grow and adapt themselves to the changing requirements of their owners," Mr. Perry said. The "grow-with-your-business" feature is based on maximum interchangeability between models. "For example, starting with a basic manual back gauge Saber cutter, either the 41", 47" or 54" size, you can convert it to a power back gauge machine and later to an auto-spacer as your business expands," he declared.

The *Saber* line is equipped with Harris-Seybold's "cushion-contact" clamp.

Wm. A. Frangos Expands Metal-life Production

William A. Frangos, Inc., New York, has recently added 20,000 square feet of floor space and new equipment to boost production of Metal-life lithographic platemaking solutions. New equipment installed at the Bellerose, Long Island plant includes: two, 500 gallon high-pressure mixing kettles, two 50 gallon glass-lined tanks and a 24" ultra-high pressure filter press. Paul W. Frangos is supervisor of production and shipping.

New Metal-life products now made available are:

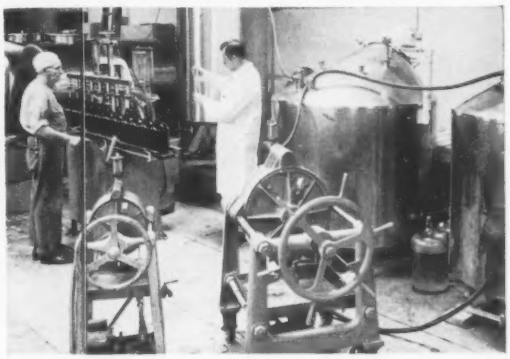
Metalgold Photo Resist Process — a coating and companion solution for all surface plates, grained or grainless, zinc, aluminum or steel.

Crystal Fountain Solution contains no acids nitrates or chromates and requires no gum; non-toxic and non-scumming.

Blue Diamond Lacquer—non-binding, scratchproof lacquer that prevents image failure from abrasion or penetration of moisture, acid and gum.

Concentrated Silvering Counter Etch — etch provides thin silver film to prevent oxidation on all types of plates.

Deep Etch Process — coating unaffected by atmospheric conditions.



Additions to the processing equipment at the new plant of W. A. Frangos, Inc. Paul W. Frangos, production manager, is shown making one of the routine tests prior to the bottling of a Metalife coating solution.

SERVICE PLUS QUALITY!

HAS MADE OUR PLANT THE WORLD'S FINEST

We Specialize in all sizes
MULTILITH and DAVIDSON PLATES

All sizes ZINC and
ALUMINUM PLATES
UNGRAINED-GRAINED-REGRAINED

35-51 Box Street Tel. EVergreen 9-4260—4261 Brooklyn 22, N. Y.

Make this Label YOUR buying guide

IT REPRESENTS
High Quality
Skilled Union Labor
"Trouble-free" Service

Our Association members are pledged to rigid standards in the interests of the Industry. For that very reason, your safest bet on re-grained plates or new metal is *The Plate That Bears This Label*. When you see it, you know you're looking at the best.

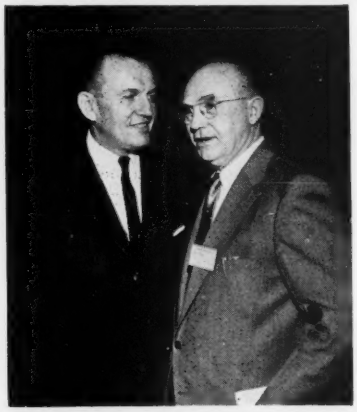
MERCURY LITHO PLATE GRAINING SERVICE
AMERICAN LITHO PLATE GRAINING COMPANY
GRAPHIC PLATE GRAINING CORPORATION, INC.
AUTOMATIC PLATE GRAINING CORPORATION
WILLY'S PLATE GRAINING CORPORATION
LITHOGRAPHIC PLATE GRAINING COMPANY OF AMERICA, INC.

MEMBERS OF THE

LITHOGRAPHIC PLATE GRAINERS ASSOCIATION, INC.
220 West 42nd Street New York 36, N. Y.

Dively Speaks at Tech Reunion

Banquet Speaker at Carnegie Tech's recent alumni seminar-reunion for graduates of the School of Printing



Management was George S. Dively (l.), chairman and president of Harris-Seybold Co. Dean Cleeton (r.) announced at the banquet that the Harris-Seybold Foundation has established two scholarships at the School of Printing Management.

•

Einson-Freeman Show Winners

"Meet the Prize Winners" party was given by Einson-Freeman Co., Long Island City, N. Y., May 9, at the Ambassador Hotel, New York. The event was in celebration of the 16 awards won in the recent Lithographers National Association Awards Competition. Fourteen of the 16 awards taken by E-F represented one-third of the total available in the store display division.

Some of the winners were: a vacuum formed dimensional, four-foot long "Chicken of the Sea" flasher illuminated pile stacker for Van Camp Sea Food Co.; a diminutive counter medallion for Artcarved Diamonds; Schaefer Beer Co.'s nine-in-one multiple use window display; Jello-O "Busy Day" floor display; and "Sports Illustrated" lithographed dimensional cardboard desk for subscription promotion in golf pro shops.

•

"Litho Night" in Los Angeles

Progress in the industry during the past decade was reported at the annual "Litho Night" program of the Los Angeles Club of Printing House Craftsmen at its May meeting conducted by president, Norm Shanks, and chairman, Joe Costello. Speakers were Al Roberts of Roberts Litho Plate & Engraving, who spoke on box printing by offset; Erling Gullixson, Alum-O-Lith Co., who discussed the history of presensitized plates; Dooley Stewart, Carpenter Paper Co., who gave the paper man's point of view; Roby Wentz, editor (*Western Printer & Lithographer*), who spoke on news developments in the industry since 1945; and Don McNutt, Service Type Setting, who gave the advertising typographer's slant on new business developments for lithography.

New Overprint Varnish

Central Compounding Co., Chicago, has just introduced "20/20 overprint varnish," a new crystal-clear varnish having non-yellowing and scratch-resistant properties. The trade name "20/20" was taken from the sight perfection term, 20/20 vision being perfect, according to the company.

Qualities claimed for the product include fast drying characteristics, good press life with fewer wash-ups, remains crystal-clear indefinitely and can be overprinted with ink or varnish.

WHAT IS YOUR JOB PROBLEM?

It is our function to bring together the right man and the right job. Our nationwide confidential service can assist you if you are a qualified man looking for a position.

You are served better by our organization because we specialize in the Graphic Arts industry. Employers all over the U. S. A. use our service. Many come to us first when needing key personnel.

Every inquiry, every assignment treated confidentially — 100%. Licensed under the Laws of the State of Ohio and City of Cincinnati.

Write for a copy "If You Are Job-Hunting, Should You Use an Employment Agency?"

Serving key personnel, foreman and higher.

Established 1952

GRAPHIC ARTS EMPLOYMENT SERVICE

HELEN M. WINTERS, MGR.

DEPT. MD-6 307 E. 4TH ST.

CINCINNATI 2, OHIO

List Your Confidential Application With Us

WORTHY OF SKILLED HANDS!

Winsor & Newton's

Series 7

"ALBATA"

World's Finest Brush for Lithographing and Retouching

For litho strength, fine point and extreme durability, use Winsor & Newton's Series 7 Finest Pure Red Sable Brushes. Made for professional graphic arts work under the most exacting conditions! Available in sizes 000 through 14.

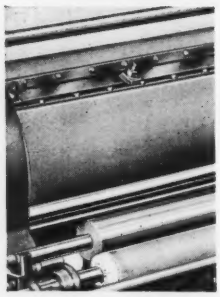
902 BROADWAY, NEW YORK 10, N. Y.

Californian Distributors:
SCHWABACHER-FREY CO.: SAN FRANCISCO

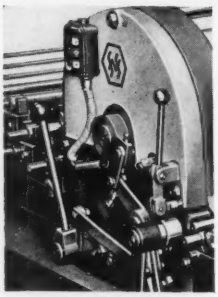
Canadian Agents:
THE HUGHES OWENS CO., LTD., HEAD OFFICE: MONTREAL

MANY OF THE FINEST PLANTS IN THE COUNTRY NOW USE THE AMSTERDAM CONTINENTAL

S & S Flatbed Offset Press



Large Cylinder



Centralized Controls

The S&S Du-Fa can duplicate press conditions for proofing with amazing exactitude. Check its cylinder, its larger-than-average inking rollers with other presses and you'll see why.

S&S Du-Fa also features an adjustable bed for printing on metal, plastic, glass, wood!

Easy to operate, with centralized controls, feeds from either side, is fast, economical for short runs. Special inking roller wash-up system—on press—cuts time between runs.

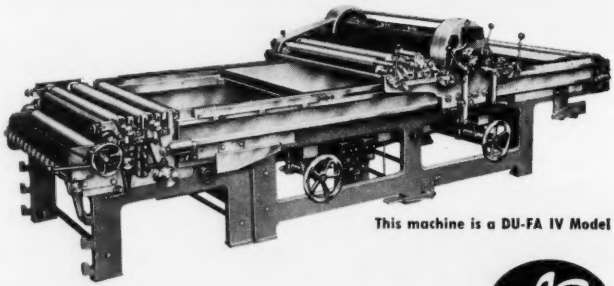
S&S Presses Are Available in 5 Sizes: From Du-Fa II taking a maximum plate of 24x24-in. up to Du-Fa VII taking a maximum plate of 46x55-in. Semi-automatic machines are also available.

Write for full details on all the special features of this modestly priced, highly versatile press. *See* how S&S Du-Fa cuts costs, increases production in a plant in your vicinity—we'll gladly arrange a visit.

FOR PROOFING, SHORT RUNS AND SPECIALTY PRINTING

WHY because . . .

- it has complete automatic inking and MOTOR-CONTROLLED DAMPENING SYSTEM
- it duplicates press conditions for fast, high-quality proofing
- it cuts costs on short-run printing
- it prints on metal, wood, plastic or glass.



This machine is a DU-FA IV Model

Imported by:

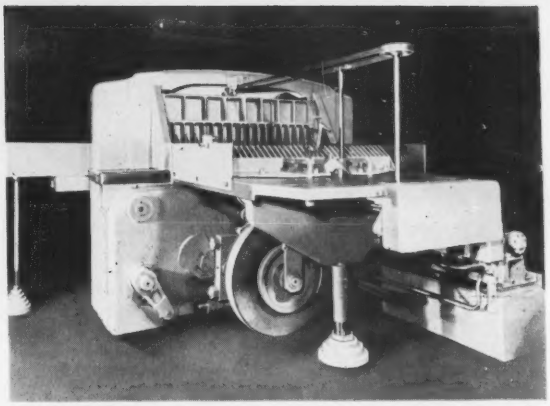
Amsterdam Continental

Types and Graphic Equipment Inc.

268-276 Fourth Avenue, New York 10, N. Y.

New Lawson Clamp Cutters

E. P. Lawson Co. has introduced its new "V65 Series" Hydraulic Clamp Cutters and Electronic Spacers to the industry. The V65 Line, according to David W. Schulkind, president of E. P. Lawson Co., New York and Chicago, includes improvements and innovations not found in the 46" and 52" Hydraulic Clamp Cutters introduced by Lawson 8 years ago.



Improvements over the 46" and 52" Hydraulic Clamp Cutters introduced eight years ago by E. P. Lawson Co. are incorporated in the new V65 Series Hydraulic Clamp Cutters and Electronic Spacers recently announced.

For the first time in hydraulic clamp cutters the clamping mechanism and the knife operating unit are separated. Hydraulic pressure is automatically applied when the clamp meets the resistance of the paper to be cut; air is removed and the lift of paper held firmly. There is no impact action, blow or shock and clamp pressure remains constant during the cutting operation, it is said.

Other features include:

a) increase of clamp lead to 4".
b) clamping pressure adjustment has been eased. Operator keeps foot on treadle and adjusts the pressure valve directly.
c) load reduced over 40 percent on the clutch, overload device, gears, levers, etc.
d) foot treadle applies full clamp pressure as pre-set by the operator.

Features added to the Electronic Spacer are:

a) Completely automatic, the back gauge is automatically released and returns to the starting position or first signal on the spacer bar when the last cut is made.
b) if back gauge is manually readjusted backward after it has stopped on a signal, and a cut is made in that position, the spacer will automatically bypass this signal and stop at the next one.
c) when loading sheets and jogging against the back gauge, the adjustable limit switch can be over-ridden by simply pressing the control button.

•

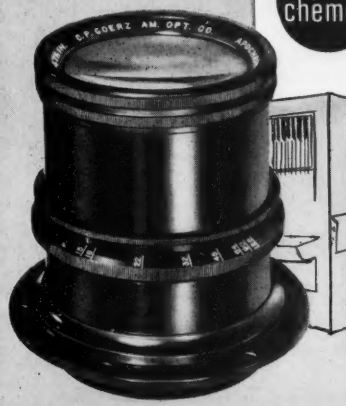
Cole Re-elected by Lotos Club

Ralph Cole, president of Consolidated Lithographing Corp., was recently reelected secretary of the Lotos Club, New York.

Did You Artarize Your Gallery? Are You Ready For Color?

These TOP Camera Manufacturers Recommend and Use...

chemco · Robertson · RUTHERFORD · GELB · LANSTON MONOTYPE · MILLER-TROJAN CO. · Wesel · KENRO GRAPHICS · Consolidated · REPRO-ART



GOERZ RED DOT ARTAR LENSES

THE LENS FOR THE GRAPHIC ARTS

You are better prepared for color if you have the New GOERZ RED DOT ARTAR Lens in front of your camera.

Remember *it's the lens* that "sees" the color copy.

Ask your Graphic Arts representative about the "Red Dot." Keep up with your competitors.

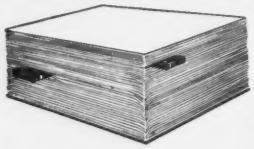
C. P. GOERZ AMERICAN OPTICAL COMPANY

Office and Factory: DOUGHTY BLVD., INWOOD 96, L. I., N. Y.

GOERZ

New PLASTIC
PILE
SEPARATOR

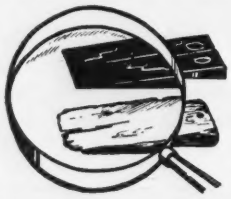
Gives Accurate Leveling of Stock Pile



- For FEEDER end to assure positive pickup
- For DELIVERY end to aid proper jogging

Speeds Production

Assures absolutely level stock piles for the feeder suckers to contact. Having a longer taper than wooden wedges, it prevents "misses", dragging, folding under, etc., because it permits closer adjustment. A great aid on the delivery end, too, as it assures proper jogging. Saves its cost in stock and time saved!



ABSOLUTELY SMOOTH — THIN LEAD EDGE

Inserts easily, quickly and cleanly into stock piles without tearing or ruffling edges of stock, which so often results in spoilage. Of smooth plastic, they slide readily into the pile and STAY in position.

No Splinters! No Rough Edges!
Splintered and cracked wood wedges often spoil stock and cause loss of press time. Hanco's Plastic Separators can't splinter and cause damage to plates, engravings and blankets.

PRICES

Less than 12	$1.65 each
Lots of 12....	1.50 each
Lots of 24....	1.40 each
Lots of 48....	1.30 each
Lots of 96	1.20 each
Lots of 144..	1.15 each

Easy to Keep Clean!
Will not soak up oil, ink and dirt to soil stock. "Easy-Pull" finger holes permit quick, easy removal from stock pile.

Satisfaction . . . or Your Money Back

A. E. HANDSCHY CO., 125 S. Racine Ave., Chicago 7, Ill. ML 655

Send Hanco Pile Separators ordered below. If not satisfactory we may return them within 15 days for full refund.

SEND US.....Hanco Pile Separators at $.....each.

COMPANY.....

ATTN. OF.....

CITY.....ZONE....STATE.....

A. E. HANDSCHY CO.

Manufacturers of Fine Letterpress and Offset Printing Inks

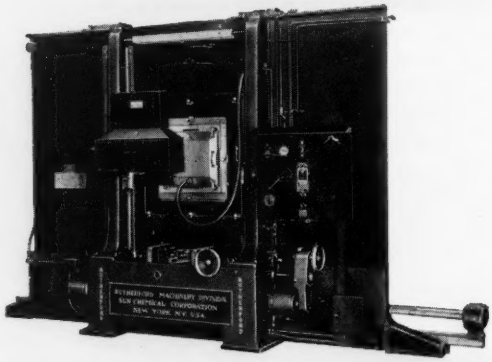
CHICAGO 7, ILL. 125 South Racine Avenue
MINNEAPOLIS 15, MINN. 422 South Third Street
INDIANAPOLIS 2, IND. 528 North Fulton St.

DISTRIBUTORS
Handschy Distributors located in all principal cities. Write for name and address of Distributor nearest you.

Why do leading lithographers choose Rutherford?

85 years as *the* pioneer builder of precision lithographic machinery assures you that the experience and skill used to produce the first bronzing machine . . . the first high speed metal decorating press . . . the first rotary offset press for paper . . . the first machinery for decorating collapsible tubes . . . and one of the world's largest cameras . . . now go into every piece of equipment bearing the Rutherford name.

PHOTO-COMPOSING MACHINES
(Step and Repeat)



Four big reasons why 87% of leading lithographers swear by these machines:

- **FAST REGISTRATION**—by quick acting quoins on all holders to hairline.
- **MICROMETER PRECISION**—¼" graduations on large dial move negative only .001" assuring accuracy and speed.
- **ACCESSIBILITY**—Backboard lowers to receive plate without interfering with arc lamp or holder.
- **SAFETY FROM ERROR** — Automatic travel stops separate negative and press plate ¾" during movement. No movement possible while negative and plate are in contact.

Other Rutherford Products

You'll find the Rutherford name is your assurance of exceptional merit on a complete range of fine lithographic equipment ranging from all-metal process cameras, precision color cameras, plate whirlers and a wide variety of coating machines for both general and special applications. Write for complete information, addressing Dept. R2-651. Like other leading lithographers, you'll agree . . . YOU'D RATHER HAVE RUTHERFORD.

A Division of Sun Chemical Corporation

Rutherford Machinery Co.

10-10 44th Avenue, Long Island City 1, N. Y.
Chicago • Toronto • Montreal • San Francisco

DIVISIONS OF SUN CHEMICAL CORPORATION
HORN • HUDSON • WILLEY (paints, maintenance and construction materials, industrial coatings) • WARWICK (textile and industrial chemicals) • WARWICK WAX (refiners of specialty waxes) • RUTHERFORD (lithographic equipment) • SUN SUPPLY (lithographic supplies) • GENERAL PRINTING INK (Sigmund Ullman • Fuchs & Lang • Eagle • American • Kelly • Chemical Color & Supply Inks) • MORRILL (news inks) • ELECTRO-TECHNICAL PRODUCTS (coatings and plastics) • PIGMENTS DIVISION (pigments for paints, plastics, printing inks)

Chicago Educ. Forum Organized

Chicago graphic arts leaders have organized the "Chicago Area Graphic Arts Education Forum," whose objectives are (1) to bring the story of career opportunities in the graphic arts to the youth of Chicago, and (2) to bring the story of public school education in the graphic arts to the printing industry. The group is sponsored by the Chicago Club of Printing House Craftsmen.

General chairman of the project is Floyd C. Larson, director of the U. S. Navy printing plant at Great Lakes, Ill., and general chairman, International Craftsmen's Printing Week Committee. Member of the forum in the Graphic Arts Association of Illinois is Frank J. Bagamery, secretary and general manager, and chairman of the industry and school visitation committee. Assisting him is the Association's president, Wm. H. Sleepeck, Jr., Sleepeck-Hellman Co.

Arthur W. Brooks, director of technical activities for the Graphic Arts Association, is chairman of the industry program committee, whose membership includes Rae Goss, Inland Lithograph Co., and president of the Chicago Lithographers Club. Loren H. Carter, manager of R. R. Donnelley & Sons Co.'s employee training department, is a member of the industrial literature committee.

The Forum program includes (1) personal appearances of printing industry speakers before faculty and student groups in the schools; (2) personal appearance of school executives and administrators before printing trade groups; (3) distribution of informative literature and visual aids which will promote Forum objectives; (4) extensive use of plant and school visits; and (5) meetings of forum groups to review activities.

A 4-page vocational guidance folder with 20 illustrations has been prepared for distribution at school assemblies, inviting young people to consider a career in graphic arts. Mr. Larson has distributed an outline of the Chicago Forum's plans to all Craftsmen's Clubs throughout the nation, urging that each club organize similar projects as a part of their 1956 Printing Week activities.

Rotary Business Forms Draws 57

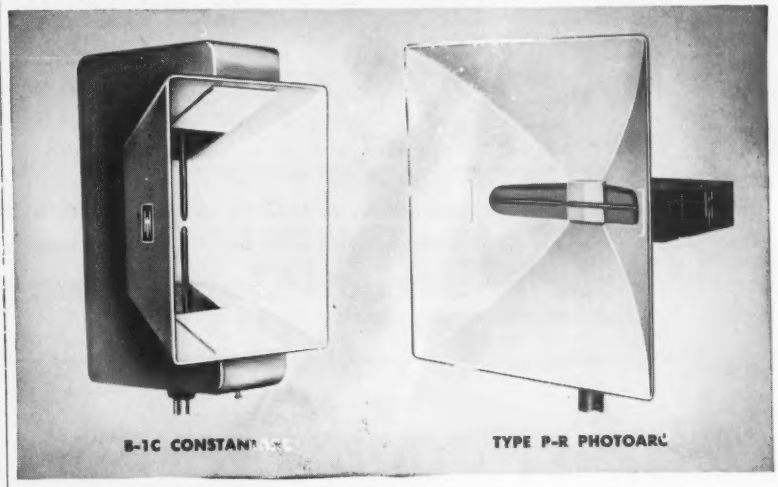
C. O. Harris, National Cash Register Co., reviewed developments in NCR Carbon-Less Paper, and Joseph Steir, Alfred Allen Watts Co., Belleville, N. J., president of the Rotary Business Forms section, PIA, spoke at the section's meeting in Cleveland, April 25-26. The group is making studies in plants through an independent engineer under the supervision of Donald E. Sommer, PIA technical director. These studies which will be performed in member plants will provide for the establishment of PAR (Production Standard) on these presses, according to Mr. Sommer.

The next meeting will be held in conjunction with the annual convention of Printing Industry of America in Atlantic City, N. J., Chalfonte-Haddon Hall Hotel, Oct. 17-21.

•

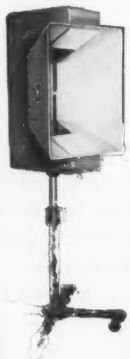
J & O Advances Executives

Jahn & Ollier Engraving Co., Chicago, has named Donald T. Suttee vice president and added Donald J. Schoenau to the board of directors.



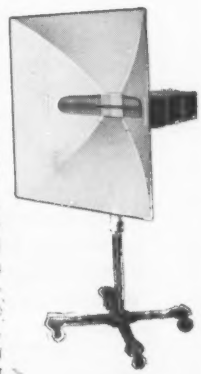
For Camera . . . for Printing . . .

MACBETH Arc Lamps are light-years ahead!



B-1C CONSTANTARC. Completely and constantly automatic. Produces a steady light of tremendous intensity which brings out tiny details in the darkest portions of copy . . . which cuts down expensive camera operating time. The Constantarc automatically compensates for power fluctuations, drafts and carbon impurities. Can be furnished with any of the standard Macbeth mountings. No other lamp on the market offers all the advantages of a Macbeth Constantarc!

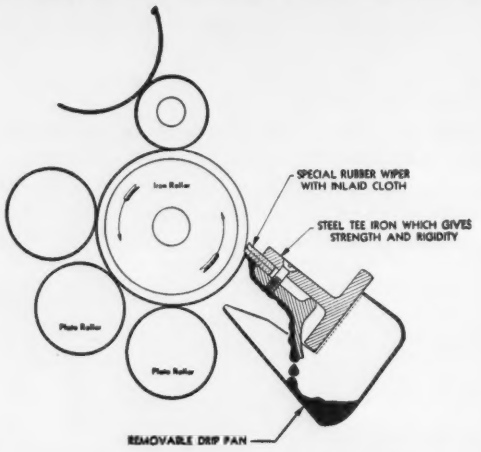
PHOTOARC PRINTING LAMP for vertical printing frames. Engineered to assure constant, steady light—both in intensity and color—regardless of line voltage fluctuations. Successive exposures produce identical results. Completely and continuously automatic like its companion "The Constantarc". Recommended for photoengravers, lithographers and in gravure and blueprinting processes. Adaptable for use on photocomposing machines. For details write . . .



MACBETH • The Lighthouse of the Graphic Arts

MACBETH ARC LAMP COMPANY 141 Berkley St., Philadelphia 44, Pa.

Are You Interested in the CLEANEST and Most Complete Press Washup in the SHORTEST POSSIBLE TIME?



Then you will want the International Press Cleaner, which time has proven to be the best.

We now manufacture efficient cleaners for the following makes of presses — Harris Offset and Rotary, Miehle Offset and Rotary, Hoe Tin Decorating, Ebco and Webendorfer.

Leading lithographers, and metal decorating establishments have made our cleaners standard equipment in their pressrooms.

We are ready and willing to back up our claims with a 30 Day Trial of our cleaners. Write and let us know the size and make of your press.

THE INTERNATIONAL PRESS CLEANER & MFG. CO.
112 HAMILTON AVENUE — CLEVELAND 14, OHIO

for the *GOOD THINGS . . .*
YOU GOTTA KNOW WHERE TO LOOK
for LITH-KEM-KO CHEMICALS

BESCO
"MEANS THE BEST"

When you're looking for the best in offset chemicals, you need look no further than Bridgeport Engravers Supply Co. The combination of LITH-KEM-KO offset chemicals and Bridgeport service will give you everything you need for good lithography. LITH-KEM-KO offset chemicals are available from our complete stock and can be delivered any place overnight — in many places, the same day.

You can get LITH-KEM-KO chemicals for deep etch plates, surface coated plates, pressroom and artroom.

BRIDGEPORT ENGRAVERS SUPPLY CO.
BOSTON: 287 Atlantic Avenue — BRIDGEPORT 2, CONNECTICUT — CLEVELAND: 1051 Power Avenue
NEW YORK: 525 W. 33 Street — CHICAGO: 900 N. Franklin Street

Letters To The EDITOR

Last fall the "Journal of Commerce" printed an article attacking the value of point-of-purchase advertising. Rebuttals came thick and fast to the newspaper, from lithographers and others. (ML, December, 1954, p. 68). Last month MODERN LITHOGRAPHY asked the Point-of-Purchase Advertising Institute at its New York headquarters if POPAI is doing anything on a long range basis to educate advertisers to the many advantages of this material. Lithographers will be happy to learn, from the following reply, that it is.—Ed.

Sirs:

Thank you for your recent letter inquiring into the steps taken by this association to combat harmful publicity against the point-of-purchase industry.

A copy of POPAI's rebuttal to the Journal of Commerce article you mention is enclosed for your information.

POPAI is constantly striving to promote wider and better use of point-of-purchase advertising and, in general, attempting to educate national advertisers and their agencies to the importance of this medium.

You will undoubtedly be interested in the enclosed report of our recent merchandising forum held at the Roosevelt in New York. POPAI is holding more and more of these meetings to help the entire point-of-purchase field.

As yet transcripts of the forum held in connection with our show in Chicago are not available, but should you be interested, we will be happy to send you a copy when they are received from the printer.

Miss Dorothy May,
Administrative Assistant
Point-ofPurchase Advertising Institute, Inc.
New York, New York

Cameron Speaks to Management

Wm. M. Cameron, vice president of Continental Can Co., was the keynote speaker at the opening session of the midwest product conference, sponsored by Chicago chapter of the Society for Advancement of Management in Chicago last month.

•

Stecher-Traung Salesman Dies

John B. Tripple, sales representative in Philadelphia for Stecher-Traung Lithograph Corp., Rochester, N. Y., died April 14 in Temple hospital in that city. He was 35.

•

Wash. Guild Has Beefsteak Party

Printers Supplymens Guild of Washington, D. C. held its first annual beefsteak dinner party May 4 at Jack Hunts Restaurant, Wash. According to Gill Miller, president, the Baltimore Guild members fattened the attendance to more than 60 and added to the fun. Speaker was Walter Haight, sports columnist, *Washington Post-Times Herald*. The June meeting will be an all-day fishing trip.

McLaurin-Jones Shows Dry-Stik

A new self-adhesive label paper line called M-J Dry-Stik has recently been introduced to the trade by McLaurin-Jones Co., Brookfield, Mass. M-J Dry-Stik will be available on Sparklekote and M-J Plated Papers and many others, the company said.

The paper is made with a self-adhesive and no moistening is required. The user peels off the protective backing and applies the label to glass, cloth, plastic, stainless steel, aluminum, porcelain, baked enamel, etc.

Schmidt Entry in Box Show

The ladder in this fibreboard display for wines telescopes so it can be extended for maximum visibility in stores with high aisle separators. The one-piece body forms its own bin, and the figure is colorfully lithographed. The display was developed by Schmidt Lithograph Co., San Francisco, for Roma Wine division, Schenley Industries,, and was an entry in the recent 1955 Fibre Box Exhibit in Chicago.

54"x77" – 54"x120"

COPYRITE PLASTIC LAYOUT SHEETS

(Made from Vinylite)

SPECIAL PRICE OFFER

36"x48" — 50"x70" — 50"x72"

THE ONLY RECOMMENDED SUBSTITUTE FOR GLASS WHERE YOU NEED ACCURATE REGISTER —

- They're Cheaper
- They're Lighter
- Non-Breakable
- Dimensionally Stable
- Clear or Matte Surfaces
- Easier Storage
- All Sizes Available
- Thicknesses, .005", .010", .015", etc.

Standard Sizes In Stock

20" x 50"	40" x 51½"	48" x 51½"	54" x 72"
26" x 36"	42" x 51½"	51½" x 60"	54" x 77"
30" x 51½"	40" x 54"	50" x 72"	51½" x 120"
36" x 50"	42" x 54"	51½" x 77"	54" x 120"

SUPPLIES FOR CHROMELINE "COLOR PROOF PROCESS"

WRITE FOR CATALOG N (SAMPLES and PRICES) TODAY

N. TEITELBAUM SONS

MANUFACTURERS OF PLASTICS, GLASS AND LIGHT ROOM EMULSIONS.

261 GRAND CONCOURSE NEW YORK 51, N. Y.

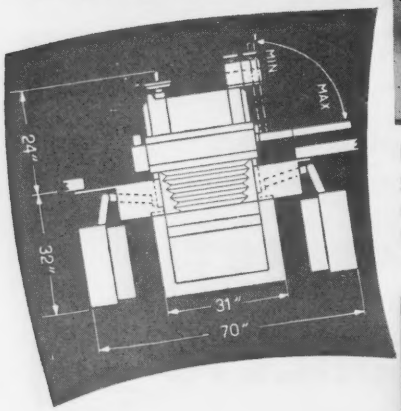
Telephone: MOrthaven 5-2050

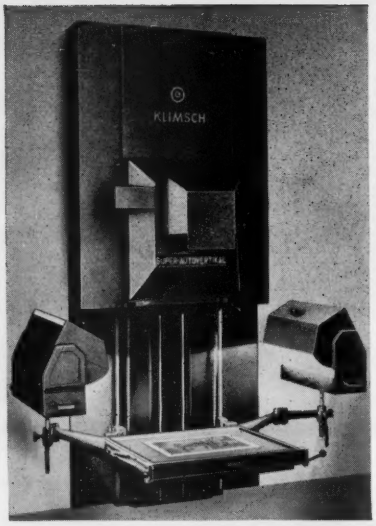
KLIMSCH
AUTOVERTIKAL

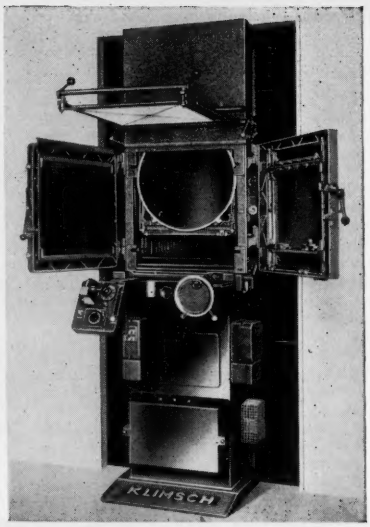
ALL-METAL PRECISION COLOR PROCESS CAMERA

PLATE SIZE	**20″ x 20″**
FILM SIZE	**16″ x 20″**
SCREEN CAPACITY	**24″ DIAM.**

ON *SMALLEST* FLOOR SPACE







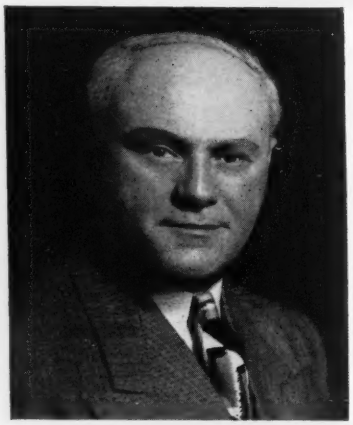
Fully automatic focusing

Screen compensator for different screen thicknesses and glass plates, with accurately calibrated dial.

Optical system including reversing mirror for normal and/or reversed negatives. Flash installation combined with mirror.

For information and list of dealers please write or phone:

REPRO GRAPHIC MACHINES, INC.
180 Varick St., New York 14, N.Y. • Phone CHelsea 2-5255



New Litho Supply Catalog

Have you seen our new Litho Supply Catalog? We'll be happy to send you a copy. We feature "Rexon" rubber blankets and can take care of your other needs for litho supplies as well. Please contact us.

WILLIAM RECHT COMPANY, INC.

GRAPHIC ARTS SPECIALISTS

50 CHURCH STREET, NEW YORK 7, N. Y. TEL.: CORTLANDT 7-8395

Toronto, Canada • Havana, Cuba • Mexico City, D. F. • Caracas, Venezuela

Fewer "Hip-Pocket" Chemists

Thomas J. Craig, technical director of Sun Chemical Corp., in observing the 10th anniversary of the introduction of Sun's Gum Arabic Solution RT 782, said, "Before the growth of lithographic supply houses, the offset printer carried his formulae for gum solutions, plate coatings, fountain solutions and other materials in his hip pocket, together with his chewing tobacco.

"In the past 10 years, quality control production and the use of high-grade select gums and other ingredients, has resulted in high quality and uniformity of Gum Arabic Solution RT 782. Streaking of plates or souring of gum in storage, for example, are things of the past."

Mr. Craig added that the total number of lithographic printing establishments has more than doubled in the past four years. Gum Arabic Solution RT 782 was introduced in 1945 by Fuchs & Lang Manufacturing Co. division of Sun Chemical. Last year Fuchs & Lang was consolidated with six other ink units within Sun Chemical as the General Printing Ink Co. and J. H. Riggs of Young & Selden

•

Deliver 3 LNA Imprinters

One of the features of the Lithographers National Association convention at Lake Placid, N. Y., this month will be the new imprinting press developed in a cooperative project started four years ago by the Bank Stationers' Section of LNA.

The project, which culminated in the past month with installation of three of the new presses in LNA member company plants, was under the leadership of the Section's Imprinting Machine committee composed of Cecil N. Rudnick of Joseph Berg Mfg. Stationer Inc., chairman; J. Anderson of Dennison & Sons; Walter D. Gemmill of Milton C. Johnson Co.; and J. H. Riggs of Young & Seldon Co. The project was coordinated by Edward D. Morris, LNA Secretary.

The plan for the development of the press, which has a guaranteed speed of 10,000 individual check impressions an hour, was approved by LNA's board of directors Jan. 31, 1951. Sixteen individual members of the Bank Stationers' Section subscribed to a special fund and entered into contract with the Stoessel Machinery Mfg. Co. for development and manufacture of a pilot model. LNA acted as custodian of the funds and as agent for the group in the negotiation of this contract.

A pilot model was built and tested under actual production conditions by technical experts from several of the 16 plants involved. The Imprinting Machine Committee held 25 meetings of intensive planning, testing and improvement of the pilot model, which was finally accepted last Aug. 24. The first production lot of eight machines is now being completed. Three have been delivered to members and the balance will follow at two-week intervals.

•

New Copy-Holder

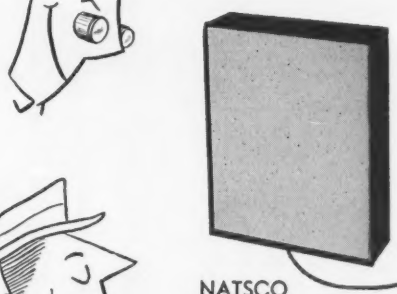
Speed Spacer Co., New York, has recently introduced an automatic copy-holder featuring an adjustable, space-copying bar. It allows work to be copied at an angle.

Important people are talking about a new and better GRAPHIC ARTS LIGHT!

(the NATSCO "CCL", of course)

The Cameraman (and whose opinion is more important?) says, ". . . makes my job easier —there's no heat, dust, or burning glare to spoil the work. I appreciate the comfort, too."

The Production Manager (who usually gets all the grief) says ". . . better results on the first shot—we get finer work with fewer retakes."



NATSCO Cold Cathode Light

The Customer (bless his heart) says, "I get more sharply registered separations with all the tonal values of the original."

The Accountant (who knows a penny saved is a penny earned) says, "The savings in current and carbons are good news to me."

They're all saying: "We get SUPERIOR RESULTS . . . at LOW OPERATING COST!"

You're invited to try a NATSCO "CCL" in your own shop on a 10 day trial . . . no cost, no obligation.

NATSCO A Complete Line for the Graphic Arts

National Steel & Copper Plate Company

653 TENTH AVENUE, NEW YORK 36, N. Y.
700 SO. CLINTON ST., CHICAGO 7, ILLINOIS

Schultz

DEEP ETCH

chemicals

Proved dependable and economical in leading litho plants for more than a decade You too will find it profitable to standardize on Schultz Chemicals for all your deep etch requirements.

H. J. SCHULTZ

1240 W. MORSE AVE. CHICAGO 26, ILL.

OVER 3,000 BAUMFOLDER USERS of the 17 x 22 "JUNIOR JET" says . . . "IT'S A GOLD-MINE!"

It will easily be the same for you as for the over 3,000 purchasers in recent years who say . . . "It pays for itself many times over every year".

It's the world's closest-precisioned . . . finest . . . fastest Folder. Makes folding your most Profitable operation . . . 5 folds in 1 operation, 60 styles of folds . . . makes perforating practically All profit. It's an automatic lightning-speed Perforator; automatic Scorer; automatic Cutter; automatic Crimper . . . All-In-One. Tomorrow's Automatic . . . at a pre-war price. Equipped with Friction Feed — $100. initial and $48. per month for 30 months . . . with Suction Pile Feed, extra motor and pump — only $100. initial — 30 months Pay-For-Itself terms.

A "GOLD-MINE" FOR A LIFE-TIME. Do allow us to mail specifications. THANKS.

RUSSELL ERNEST BAUM, INC.

615 Chestnut St., Phila. (6) Pa. LOmbard 3-8164

OFFSET ENGRAVINGS AND PRESS PLATES FOR LITHOGRAPHERS

If it's quality you desire, call Dan or Angelo. Our reputation is your guarantee of top quality color or black and white reproductions. We deliver positives, negatives or press plates.

Power Press
and
Hand Proving

Member of Lithographic Engravers & Platemakers Assn.

DANIEL MURPHY & CO., Inc.

480 CANAL ST., NEW YORK 13, N. Y.

WOrth 4-6271-2-3

DOT AREA

(*Continued from Page 75*)

is, the point at which the edge is sharpest. It may also be the point at which the density gradient exceeds a certain minimum value; that is, the point at which a dot fringe appears to become an edge.

Differentiating circuits are now being added to the dot-area meter so as to furnish a signal representing the density gradient of the dots. With this information, we can determine dot area corresponding to the various possible criteria of visual dot area and perhaps determine exactly what is seen when a dot is examined visually. By using both the signal representing the dot boundary density and the density gradient signal, it should be possible to measure dot gradient in the vicinity of the dot boundary density and so measure printing dot sharpness directly.

The instrument described in this paper was developed primarily for research purposes. As such, we believe that it will be very useful in evaluating the many factors involved in the production of a printed picture. It is possible that with further development it would evolve into an instrument no more complex or difficult to use than an electronic densitometer. If so, it would become a useful tool in production control in the photomechanical process, for use in those steps where dot area rather than density is the significant variable.

ACKNOWLEDGEMENT

Our thanks are due to Messrs. R. E. Maurer and W. J. Nielsen, of these Laboratories for their work on the moiré-pattern densitometer and the contact positive methods, respectively.

REFERENCES

(1) F. R. Clapper, "Factors Affecting Tone Reproduction with Contact Screens," Proc. 5th Ann. Tech. Meeting TAGA, (Technical Association of the Graphic Arts), Washington, D. C., April, 1953, pages 28-40.

(2) W. R. J. Brown, "A Rapid Scanning Microdensitometer." (Not yet published.)

DISCUSSION

Mr. Rhodes (RIT): You mentioned, Don, density measurements on halftone negatives were unsatisfactory. Did you mean that to indicate it was an unsatisfactory indication of the dot area?

Mr. Howe: That is what I meant. It doesn't give a true indication of the dot area as it will appear on the press plate or the printed sheet. However, it is quite reproducible and can be calibrated as a control means in the printing process. For instance, the highlight dot may be veiled over with a density of 0.30 without being visible, which will immediately give a 100 percent error in measurement of dot area if you tried to convert density to dot area.

Chairman Tobias: Don, you projected the use of the instrument for press sheets. Would it be completely applicable to that purpose, or, let's say, would it have very much benefit over straight densitometric measurement?

Mr. Howe: It will read dot area directly independent of ink density. As such, it would be more useful in research, I think, than in production control. Actually, the final press sheet is viewed visually and the density measurement is probably the best measurement for such purposes.

Mr. Jorgensen (LTF): I just want to make a comment on that. I appreciate the value of the instrument and the advantage of that extremely rapid measurement. I just thought you might be interested in a method we have used for a couple of years on measuring the edge gradient of printed halftone dots, which is much slower, and it is related more to the system that you showed in your first slide.

Mr. Howe: I would like to talk that over with you later.

Mr. Jordan (Time, Inc.): On your pattern there, what is your percentage of error, approximately, and does it vary between your highlights and your extreme shadows?

Mr. Howe: We really don't know yet. The instrument is at the point where we have got to find a more accurate means of measuring standard dots for calibration. It is at least as good as the film positive method, I believe. The accuracy should be constant throughout the scale.

Dr. Walter Clark (Eastman): Don, supposing you had an ideal dot, with infinite gradient and infinite density. Would you get any signal out of this machine?

Mr. Howe: Yes.

Dr. Clark: What would you get?

Mr. Howe: We are picking the signal representing the dot in the vicinity of a density of 1.0. With perfect dots, we would get a constant dot area no matter what the density was. With an unsharp dot, the size of the dot varies depending upon the density chosen for the measurement.

Dr. Hartsuch: You are working mostly with negatives and positives. There is a point you may want to watch in the platemaking end of this thing on your measurement of plates and press sheets. The number of gray steps you will get on the sensitivity guide between the black and the white will vary considerably depending on the type of plate and also on the weather, and you mentioned it tended to sharpen on the plate. I am not sure that that is correct. Somtimes you may get four or five gray steps printing on the sensitivity guide between black and white.

Mr. Howe: Yes. The upper and lower clipping levels on the electrical signal are variable, so when we come to such measurements, we can probably raise the upper limit and lower the lower to cover a greater range in the dot.

Mr. Jorgensen: You were mentioning making your master calibration of dot size relationship and I want to mention one we have used in the Foundation quite well. It works better than the film positive, and that is to take a whitened aluminum sheet, chemically grained with hydroxide and nitric acid. It gives a very white, fine grain.

Chairman Tobias: As you showed in

SPLCORP

Hydro-Pressed Rigid Plastic Sheets

VINYL	ACETATE	POLYETHYLENE
POLISHED-POLISHED (P.P.)	POLISHED AND MATTE (P.M.)	MATTE AND MATTE (M.M.)

SPLCORP is recommended as the only dimensionally stable substitute for glass, when Stripping Positives or Negatives for Multi Color Work, if close registration is desired.

A few advantages enjoyed by the Lithographic Craftsman when using SPLCORP sheets are: Easy Handling, Increased Production, Job Assurance, No Breakage, and No Storage Problems.

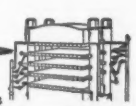
SPLCORP is manufactured in thickness ranging from .005" to .1", and is available in Transparent, Translucent, or Opaque, with either a Mirror Polished or Matte Finish on one or both sides.

WE ARE THE ORIGINAL PROCESSORS OF RIGID SHEETS IN SIZES OVER 36" x 48"

Write for samples and latest Price Lists

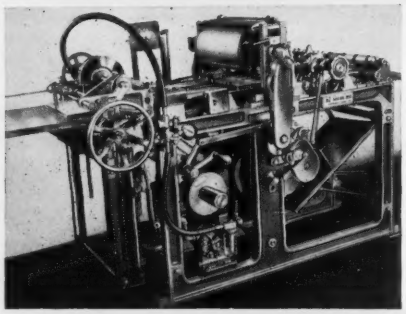
SCRANTON PLASTIC LAMINATING CORP.

Laminating . Press Polishing



3218 PITTSTON AVENUE Phone: Scranton 2-0407. SCRANTON 6, PENNSYLVANIA

IMPRINT AND NUMBER CHECKS WITH McADAMS NEW PRESS REQUIRES ONLY MINUTES OF PREPARATION BETWEEN JOBS



McADAMS AUTOMATIC CHECK PRESS

McAdams new press is an exciting invention in fast, labor saving, automatic operating.
Job after job is turned out with minutes required for changing of type.
Imprints bank checks in gangs of 2, 3, 4, 5 or 6 checks needing only one type set-up of composition. Numbers checks and stubs at same time.
An electric press counter is governed by a presetting dial so as to stop the press at end of each job.

JOHN McADAMS & SONS, INC.
ALBERT BROADMEYER, PRESIDENT
20-22 KNIGHT STREET • NORWALK, CONN., U.S.A.
ESTABLISHED 1842

Write for Check Press Bulletin No. 9.
WRITE for these circulars—specify by name.

McADAMS PRODUCTS
Since 1842

Handy Way To Subscribe

Modern Lithography
Box 31, Caldwell, N. J.

Send Modern Lithography, starting with the current issue, as indicated.

1 Yr. $3 ☐ 2 Yr. $5 ☐ Payment Enclosed ☐
Send a Bill ☐
Foreign Rates Higher (see page 5)

Name .....

Street .....

City..... Zone..... State.....

DRY OFFSET PLATES on MAGNESIUM

Line & Halftone Combination
Black & White and Color
Also Four-Color Process
All sizes up to 48″x72″ on
.025″ or .016″ Magnesium

•

We also service letterpress printers with Magnesium printing plates. 16 gauge or 11 point, blocked or unblocked.

•

24-Hour Service • Prices on Request
Address all inquiries to:

COLOR PRINTING DIVISION of the TRENTON TIMES
600 Ingham Ave. Trenton 8, N. J.

A Complete Service to the Offset Printer

OVER 26 YEARS SERVICE TO LITHOGRAPHERS

COLOR CORRECTED NEGATIVES, POSITIVES, BLACK AND WHITE DEEP ETCH, ALBUMEN MACHINE MADE PLATES

EVERY JOB GIVEN EXACTING CARE AND SUPERVISION

THE PHOTO LITHO PLATE COMPANY
113 ST. CLAIR AVE., N. E., CLEVELAND 14, OHIO TELEPHONE CHERRY 1-7442

your discussion, the type of development that was used tended to affect the type of positive duplicate that you made of the negative. Dont you have a comparable situation with plate-making in a given halftone dot, because of, let's say, undercutting of the dot or the grain structure or whatever else can cause distortion?

Mr. Howe: That is right. We would like to measure the dot area of the negative as the plate sees it, assuming the plate were perfect. With that information, we can determine what happens in the plate-making process in terms of halation, dot spreading, etc.★

Correction

Author Philip E. Tobias, Edward Stern & Co., Philadelphia, points out that Figures 2 and 4 were reversed in his TAGA paper "Color Correction Process," April ML, page 73. Also, on page 78, $1 = G/G^1$ should have read $1 - G/G^1$.

3-COLOR

(*Continued from Page* 55)

three-color work, called attention to the need for imagination in using new techniques for automatic control of processes.

A round-table discussion, led by DR. C. A. HORTON, *Eastman Kodak*, covered technical questions fired at a panel of experts composed of previous speakers and panel members, including DONALD A. RAY, co-author with Mr. Gosling of the paper on control methods.

MR. MORROW acted as moderator of a discussion of equipment and supplies. On hand for this part of the program were representatives of five press manufacturers, two makers of special three-color cameras and men from firms making or distributing ink, plates and technical supplies.

R.I.T. officials said the Institute is ready to help three-color printers with special training on three-color equipment, further research and development work, and information from the Graphic Arts Information Service, which is a clearinghouse for matters pertaining to this new printing field as well as longer established ones.

At a dinner meeting, Dr. Mark Ellingson, president of R.I.T., described the Institute's interest in the industry since 1937, when the Department of Printing was formed. Ralph M. Evans, director of Kodak's Color Technology Division, addressed the evening meeting on color perception and the tricks our eyes play on us.★

TAGA

(*Continued from Page* 50)

liam Reed; masking nomenclature—Mike Bruno; auditing—Joseph Mazzaferri; ISCC—Don Smith; membership — V. Barta; nominating — R. Schaffert; papers—William Walker; publishing papers — Joseph Ulrich; 2nd publishing committee—Norman Reamer.

General chairman for the 1956 convention, May 7-9 at the Edgewater Beach Hotel, Chicago is Mike Bruno, LTF. Chairman of the 1957 convention, Philadelphia, is Joseph Mazzaferri. Unanimously approved was a motion to give a certificate of appreciation to past presidents of TAGA.

Electronic color correction and the adaptation of the Neugebauer equation was the theme of the first morning session. To lend even greater significance to the discussions, Dr. Neugebauer, himself sat in on the talks.

History-maker at the convention was Jacqueline Fetsko, National Printing Ink Research Institute, first woman ever to present a paper at a TAGA convention. Miss Fetsko attracted a capacity audience, especially significant since the paper was scheduled immediately following lunch and the annual business meeting.

Last minute changes in program included cancellation of the paper, "The Use of Jury Panel and Ranking Methods to Determine Statistically the Significant Difference, If Any, in Printability Between Two Products", due to the absence of the author, Donald Macaulay. The paper will

NEW C-S Dampener Washer

. . . PAYS FOR ITSELF IN LESS THAN 6 MONTHS

Washing your dampeners by hand or covering and running-in new covers on your press is a costly, time-consuming job. *C-S Dampener Washer will save you $990.00 a year.*

Just set your used or new dampeners into a C-S Dampener Washer. New covers are run-in without tying up your press. GET UP TO FOUR MONTHS AND MORE use before recovering.

Dampeners run together, turning on their own centers, just as they do in your press! No scraping action to wear out the nap of the covers.

With a stainless steel tank, the C-S Dampener Washer is mounted on 4 swivel casters. When not in use, it can be stored out of the way. Use any sink or faucet to clean or run-in your dampeners. Pump returns water to sink; no floor-drain or permanent installation necessary.

C-S ROLLER WASHER
(IN THREE SIZES)
14 x 20 to 17 x 22
14 x 20 to 22 x 34
14 x 20 to 35 x 45
OR TO YOUR SPECIFICATIONS

Registered: U.S. Patent Office
U.S. Patent rights pending

ESKAY, INC.
1279 W. 3RD STREET
CLEVELAND 13, OHIO

'BARTELS'

FRESH GUM

SOLUTION 14°

Stays fresh! Ideal
for developing pre-sensitized
Photo-Offset Plates

GORDON BARTELS CO.
ROCKFORD, ILL.

'BARTELS'

DEEP-ETCH
COATING

Flows Without Streaks
Best for fine or grainless plates

GORDON BARTELS CO.
ROCKFORD, ILL.

'BARTELS'

ETCH-GUM

Combines two operations
Safe! No chromates
Ask your dealer

GORDON BARTELS CO.
ROCKFORD, ILL.

ARISTO COLD LIGHT SAFELIGHTS
FOR THE GRAPHIC ARTS

MORE SAFE LIGHT- LESS EYE STRAIN

ARISTO COLD LIGHT Safelight Units, because of the elongated design and "cold light" Ruby lamps insure better coverage . . . lighting up dark areas and eliminating shadows.

Model C-RS26
9" x 26" Reflector Unit $58.00

Model C-RS18
5½" x 18" Reflector Unit $38.00

Aristo COLD LIGHT Safelights are designed for ceiling suspension. They are simple to install. The units are sturdily built, and finished in attractive gray metal crinkle.

Both models are equipped with the ARISTO Ruby Cold Light Lamp. For Free Literature, write

Aristo ARISTO GRID LAMP PRODUCTS INC.
Dept. L-65 106-23 Metropolitan Ave., Forest Hills, N.Y.

BM HALFTONE SCREENS
BLACK AND WHITE AND COLOR

in use around the world

Many standard sizes and lines available for immediate delivery.

Make your 24" camera do the job of a 32" with a set of BM angle screens.

A set of 20" x 24" four angle screens will make as large a job in a 24" camera as will a 23" circular screen in a 32" camera.

ask your GRAPHIC ARTS SUPPLIER

BM HALFTONE TINTS

Your Customers want
STANDARDIZED BM TINTS

Keep complete selection on hand at all times. Don't waste valuable camera time making tints. 60 to 133 line in 6 tone values.

Buckbee Mears Co.
SAINT PAUL 1, MINNESOTA

33 YEARS OF OFFSET PLATE MAKING AND PLATE GRAINING

CHICAGO LITHO PLATE GRAINING CO. INCORPORATED

COMPLETE OFFSET PLATE SERVICE

TELEPHONE STATE 2-8590

214-216 NORTH CLINTON STREET, CHICAGO (6)

appear in the printed proceedings.

A praiseworthy job was done by J. F. Dowdall, Minnesota Mining and Manufacturing Co., who presented, "Light Sensitivity of Diaz-Onium Compounds". Mr. Dowdall had lost his suitcase containing all his notes and had been plagued with several other frustrating scheduling mishaps; however, he delivered a flawless talk from notes hastily sketched only 30 minutes before the presentation.

The paper, "Investigations of Objective Methods for Evaluating Sharpness in Lithographic Press Operation", was not given by Mr. Rhodes because of absence (a European business trip) but was presented by Mr. Philips.

The stage of development of electronic printing today was compared to that of the artist years ago taking stone, putting ink and water on it and calling it lithography. John Bradford, U.S. Radium Corp. discussed the use of radio active phosphates to monitor "pirate" inks in multicolor printing and talked of static elimination by blowing ionized air in areas normally inaccessible.

A number of TAGA papers will be printed in succeeding issues of ML. Abstracts of all papers appeared in the May issue.★

AIGA

(*Continued from Page 49*)

quality house. Some of the award winners are displayed on page 49. Three other New York lithographers received multiple awards: Advertisers Offset, 6 winners; United Offset, 5; and Associated Offset, 4.

More than 2600 entries from all parts of the United States and Canada were received for the 13th annual exhibition. The show opened in New York, now is touring the U.S. and Canada and probably will be shown in Europe, according to AIGA.

Judges, who picked the graphic arts pieces which most successfully integrated the best in design, typography, reproduction and presswork, included: Alvin Eisenman, Yale University Press; Una Johnson, Brooklyn Museum of Art; Walter Howe, R. R. Donnelley & Sons Co., Robert Blattner, *Readers Digest;* and Robert Pliskin, McCann-Erickson.★

R & E COUNCIL

(*Continued from Page 53*)

sired in the highlighted area and can produce a vignette ranging from 90 per cent at the outset to a drop-out at 0.1 to 1.0 inch on a 250 per cent final enlargement. It can further produce a vignette ranging from 90 per cent at the outset to a given overall tone such as 10, 20, 30 per cent, etc.

A Short Run 3-Color Printing System, Eastman Kodak Co., by Lester Goda, Jr., Graphic Reproduction sales division.

Abstract: The short run 3-color printing system devised by the Kodak Research Laboratories is designed to reach a new market where pleasing color quality at the lowest possible cost is desired. Features of this system include the use of specially selected inks, a single color correction mask and no handwork at any stage. A special camera has been built to produce the direct screen separation negatives and mechanical register is used throughout from camera to press.

Battelle Memorial Institute, by Lewis E. Walkup, chief, Graphic Arts division.

Project Sponsored By: Engraved Stationery Manufacturers' Research Institute, Inc. Studies for the Institute relate to improvements in the inks, particularly in reduction of the drying time. Objective of the work is to eliminate the necessity for laying printed sheets on drying racks. A black ink of superior properties has been developed. Colored inks also are being investigated.

Project Sponsored By: Gravure Research, Inc. Current work is concerned with simplifying the etching operation to permit better control. A study of the mechanism by which the etching solution penetrates the carbon tissue resist is also in progress. Further work is being done on the problem of difference in halves.

Project Sponsored By: Printing Plates Research, Inc. Improvements in the processing of Vinylite molds are being studied. Particular attention is being given to joining of the molds.

Project Sponsored By: The Haloid Co. Xerography has been developed for use in preparing spirit-duplicating masters. It is the first time a photographic method has been applied successfully to preparing spirit-duplicating masters. It thus simplifies the reproduction of existing copy, such as order forms, invoices, and other materials used in office systems. The Haloid Co. is field testing prototype apparatus for this application and hopes to have commercial equipment available by the end of the year.

Project Sponsored By: U. S. Army Engineer Corps, The Engineer Research and Development Laboratories. Laboratory work was completed on the preparation of full-size metal lithographic plates by xerography for printing topographic maps. Using laboratory equipment, metal lithographic plates for reproducing line subjects can be prepared in approximately ten minutes. The laboratory equipment is now being tested by ERDL. Work has been started on the preparation of lithographic plates by xerography for printing photomaps.★

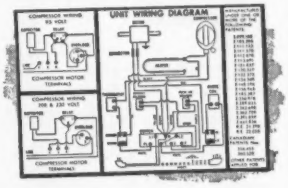
Stickin' Around with KLEEN-STIK

Quick, Henry—the KLEEN-STIK!

Don't let your customers tear their hair when they're faced with an "impossible" P.O.P. display or label problem! Save their scalps with KLEEN-STIK—the pressure-sensitive "miracle" adhesive that can do practically *anything.* No pain, no strain . . . just fast, easy, *effective* results! F'instance, show them how *these* advertising genii solved their "stickers"!

The Tax Got the Ax . . .

When excise taxes on cameras were reduced recently, ARGUS CAMERAS, Inc., of Ann Arbor, Mich., almost had to "take the ax" to over *$7,000 worth* of P.O.P. displays! But Ad Manager JAMES STEEL "flashed" to the rescue with this easy-on price-change label on KLEEN-STIK. It was simple to peel-and-press over the old price—and the whole thing was accomplished on an investment of less than $100! LAUREN WILD of APCO PRINTING, Ypsilanti, collaborated on the bold, neat printing job.



Kansas Tornado

Producing long-lasting, economical and *legible* wiring diagrams for a variety of "Vornado" Air Conditioners, Air Circulators and Heaters is a bit of a "twister". But the O. A. SUTTON CORP., of Wichita, licked it with KLEEN-STIK Kromekote labels. They're a "breeze" to apply, and stick *tighter than tight* on the metal chassis. Copy is sharply silk screened in black, with a coat of clear lacquer for added protection. WARREN BURDICK CO. gets credit for the idea, with production by WOODS-BEETON DECALS.

YOU, TOO, can be a "whirlwind" in the P.O.P. and labeling field, by recommending KLEEN-STIK to *all* your customers. Comes in a wide variety of workable stock—write for your cyclone of selling ideas in the big *free* "Idea Kit" today!

KLEEN-STIK PRODUCTS, INC.
225 North Michigan Avenue • Chicago 1, Ill.
Pioneers in Pressure Sensitives to the Trade

The Litho Industry Prefers

ZINC

ILLINOIS

LITHOGRAPHERS PLATES

World Famous for Superior Quality

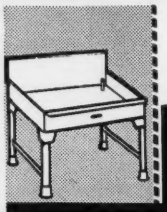
A product of 82 years of experience

ILLINOIS ZINC COMPANY

Chicago 32
2959 West 47th Street
LAfayette 3-1600

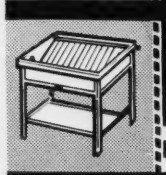
New York 20
630 Fifth Avenue
CIrcle 7-0874

Production speeded... quality control improved



with LEEDAL

TYPE 316 STAINLESS STEEL EQUIPMENT for GRAPHIC ARTS PROCESSING



HEAVY DUTY SINKS • TRAYS • PLATE TROUGHS

CORROSION-RESISTANT · STRONG · ECONOMICAL

LEEDAL — the complete line of top quality stainless steel processing equipment, all scientifically designed for dependable, faster, better work and ease of handling plates and film — thus assuring dividends in production and efficiency in your plant.

Available in a complete size range for every requirement

LEEDAL features • heli-arc welded joints • type 316 stainless steel • high lustre satin finish

(CUSTOM BUILT EQUIPMENT MADE TO ORDER)

SEE YOUR SUPPLY HOUSE REPRESENTATIVE OR Write today for your free copy of Bulletin L24-

LEEDAL STAINLESS STEEL PRODUCTS, INC.

2929 South Halsted Street • Chicago 8, Illinois

THE *Luxometer* FOR PRECISION EXPOSURES

The LUXOMETER is an instrument for integrating light. It automatically shortens or lengthens the period of exposure to compensate for fluctuating light intensities.

The LUXOMETER'S exclusive and patented features make it the only light integrating instrument to win the acclaim of Graphic Arts authorities all over the world. Its proven superiority is attested by the great number of users who have reordered . . . many plants with a LUXOMETER on each camera, photocomposing machine and printing frame.

A PARTIAL LIST

of those who are now using SIX or more LUXOMETERS:

Alco-Gravure, Haboken, N. J.	8
Brett Lithographing Co., L. I., N. Y.	6
Consolidated Lithographing Co., N. Y.	8
Defense Printing Services, Washington, D. C.	13
Graphic Arts, Inc., Phila., Pa.	8
Joseph Hoover & Sons Co., Phila., Pa.	6
Intaglio Service Corp., N. Y.	10
Regensteiner Corp., Chicago, Ill.	7
U. S. Govt. Printing Office, Washington, D. C.	7
Western Printing & Litho, Racine, Wis.	41

A galaxy of Luxometer users!

See your dealer or write for free trial offer on lease and purchase plan.

ELECTRONIC MECHANICAL PRODUCTS CO.

Dept. M, 15 N. Virginia Ave. (emipco) Atlantic City, N. J., U. S. A.

Your Proofs prove it pays to *Specify*

SUPER-GROUND LITH-RITE ZINC LITHO PLATES

Available through All Leading Grainers

Pressmen know LITH-RITE plates are *performance-right*. That uniform surface quality and temper—that freedom from sub-surface faults—means clearer overall impressions every time. Fewer stoppages too, because LITH-RITE won't "flake off" during the run.

The American Zinc Products

A Division of BALL BROTHERS CO., INC.

GREENCASTLE, INDIANA

99 PARK AVE., NEW YORK • 3428 W. 48th PL., CHICAGO

(*Continued from Page* 93)

ELIMINATION OF GUESSWORK IN COLOR REPRODUCTION. *Lithographers Journal* 40, No. 1, April, 1955, page 15. By running a halftone step tablet with eleven steps in various combinations of the True Color Process Inks on uncoated and coated paper, a total of 18,000 color squares is obtained. The Krug Litho Art Co. will market this True Color Process Guide. When used with the balanced True Color Process Inks, the guide will give an indication of the range of the four-color process as well as assist the various craftsmen responsible for maintaining good color reproduction.

Graphic Arts—General

QUALITY CONTROL. H. Segall, L. Pollner and C. Henderson. *National Lithographer* 62, No. 3, March, 1955, pages 26-28 and one page of illustrations (4 pages). This article consists of excerpts taken from talks by quality control experts of the Consolidated Lithographing Company at a joint meeting of Litho Club and Printing House Craftsmen of New York. Covered in the discussion are quality control measures in raw material ordering and in the pressroom.

DRY OFFSET. Progress Report No. 2. D. W. Lewis. *American Newspaper Publishers Association Technical Report* No. 21, May 4, 1955, pages 1-4 (4 pages). It is the purpose of this report to briefly summarize the work done during the past eighteen months in the development of the dry offset process. This report covers the work that has been done on negative specifications, printing, and etching techniques including the application of the ANPA-Dow etching process to dry offset. The report also covers press, blanket, ink and paper requirements.

WHAT'S NEW IN THE GRAPHIC ARTS? *Share Your Knowledge Review* 36, No. 4, January, 1955, pages 14-24 (11 pages); from *Pacific Printer*, July-August, 1954. Excerpts from talks at a Pacific Society Conference Panel which gave significant developments within the different phases of the industry. Included are: Photoengraving Advances; New Method of Mounting Plates; Modern Color Reproduction; Faster Drying Printing Inks; Electronic Justification; Quality Control in Paper; Newspapers-Pioneers in Color; Commercial Use of Teletypesetter; and Engraving by Electronics.

*IMPROVEMENTS IN PRINTERS' BLANKETS. *British Patent* 718,519. Dunlop Rubber Co., Ltd. *Tin Printer and Box Maker* 31, No. 362, March, 1955, page 10. A printer's blanket has a low elongation in the longitudinal direction and comprises a rubberized fabric in which is incorporated a fabric ply of prestretched warp components, the ply having at most a low weft contact, and a ply of normal body fabric.

PRINTERS AND LITHOGRAPHERS ENJOY RECORD BEST FINANCIAL CONDITION. P. B. B. Andrews. *American Printer and Lithographer* 136, No. 3, March, 1955, pages 35-36 (2 pages). The final quarter of 1954 found the printing and publishing industry in its strongest financial situation. A detailed cross section of the current financial position is presented.

*PHOTOMECHANICAL PRINTING SURFACES. *British Patent* 695,197. Kodak, Ltd. *Abridgement of Specifications* XX, 1955, page 248. Printing plates having a relief image are made by coating a support with a layer of a polymeric soluble cinnamic acid (including a ring substituted derivative thereof) or furylacrylic acid ester of a polyvinyl alcohol or cellulose, exposing to a light image to insolubilize the ester in the exposed area thereof and washing away the unexposed areas with a solvent for the ester. Polyvinyl cinnamate is the preferred ester and instructions for making this from cinnamoyl chloride and polyvinyl alcohol are provided; similar esters made from *o*-chloro- or *m*-nitro-cinnamic acid chlorides or furacrylyl chloride, or the corresponding cellulose esters, may be used. The esters are applied to plates as by whirling or machine coating methods, polyvinyl cinnamate in a mixture of xylene, toluene, *n*-butyl alcohol and isopropyl alcohol, polyvinyl *m*-nitro-cinnamate in nitrobenzene and cellulose cinnamate in 1:4-dioxane, the coatings being dried at room or elevated temperature in subdued light. The coated plates, which have a speed of the order of bichromated gelatin, are exposed as under a line or halftone image and developed by washing with a hydrocarbon such as benzene or with one of the above-mentioned solvents. Particular types of plates provided with an insolubilized polyvinyl cinnamate relief image in this way are described in seven examples. Patent Specification 695,262 is referred to.

*DEVELOPER COMPOSITION FOR DEVELOPING AN ELECTROSTATIC LATENT IMAGE. *U.S. Patent* 2,638,416. L. E. Walkup and E. N. Wise. *Monthly Abstract Bulletin* 40, No. 6, June, 1954, page 233. A developer composition for developing an electrostatic latent image of substantially homogeneous polarity contains spherical carrier particles and pigmented resin powder particles which are loosely movable and electrostatically coated on the carrier particles. By mixing with the carrier particles, the powder particles acquire a charge of polarity opposite to that of the image. The powder particles can be electrostatically removed from the carrier surfaces by and to the charged portions of the electrostatic image, and are preferentially attracted by and to the carrier surfaces from the background portions of the image.

•

YPE Club Elects Coles

Chas. H. Coles, De Lang, Coles & Co., was elected president of the Young Printing Executives Club of Chicago at the annual meeting May 4. Ralph Johnson, Jr., Johnson & Quin, is vice president; Peter Repp, Wood-Repp, secretary; and Jack Hilon of Service Typographers is treasurer.

GUEST EDITORIAL

(*Continued from Page* 37)

of competition. This goes for lithographers, as well as for other sections of business and industry. It may be asked "What can you and I as individual lithographers do about the keenly competitive situation we face?"

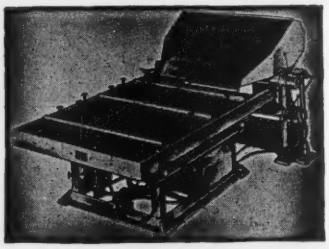
I believe that every one of us who bears top management responsibility has multiple obligations — to do everything within our power individually to increase the overall efficiency of our operations and, thus, to reduce costs to an irreducible minimum; to do everything in our power to enlist, and to earn the enlistment of, the enthusiastic support and interest of every one of our employes in the job we are trying to do in satisfying our customers' needs and requirements; to improve our quality and our service to our customers; to develop a sound sales policy and to see to it that our sales representatives understand and believe in it; and, finally, as the only guarantee to our continued existence, to insist on the fairness and the rightness of a fair and adequate profit.★

The three steps in winning a prize in the 1955 P.I.A. Printers' and Lithographers' Self-Advertising Exhibition and Awards. Take the first one now — plan your advertising. For contest rules and entry blanks, write Printing Industry of America, Inc., 719 Fifteenth St. N. W., Washington, D. C.

MAKERS OF THE
FINEST QUALITY COLOR PLATES
FOR
OFFSET
LITHOGRAPHY

THE
STEVENSON
PHOTO COLOR SEPARATION CO.
400 PIKE STREET
CINCINNATI 2, OHIO

CRISP-VELVET-GRAIN



35 years experience graining plates that please both platemaker and pressman

All sizes ZINC and ALUMINUM PLATES

Ungrained - Grained - Regrained

WILLY'S
Plate Graining Corp.
34-12 10th Street
Long Island City 6, N. Y.
Phone RA 8-1526

Member, Lithographic Plate Grainers Association, Inc.

SMOOTHER
PRINTING
PERFORMANCE
with the new
EEZY-LITH
NUMBER 10

- ELIMINATE PICKING and sticking on coated and card stock
- PREVENT OFFSET
- OVERCOME Tackiness in inks or blankets
- BRING ABOUT faster drying
- FREE FLOWING consistency in the ink for more even coverage on solids

MEMBER

Not to be confused with wax compounds, varnishes or driers. "EEZY-LITH #10" will not change the shade of the ink or harm the rollers, plate or blanket.

ROLL-O-GRAPHIC CORP.
Dept. M 133 PRINCE ST., NEW YORK, N. Y.

LOOKING FOR EQUIPMENT BUILT TO SAVE LABOR COSTS!
CHECK THIS LIST — WRITE FOR FREE ILLUSTRATED BULLETINS

McAdams specializes in developing modern, high speed machines that are streamlined to operate automatically with a guarantee to save money over the old methods of operating.
Why not learn how you can improve your plant and make your operating more profitable?

WRITE FOR BULLETINS BY SPECIFYING CODE NUMBER FOR ITEMS IN WHICH YOU ARE INTERESTED

JOHN McADAMS & SONS, INC.
ALBERT BROADMEYER, PRESIDENT
20-22 KNIGHT STREET • NORWALK, CONN., U.S.A.
ESTABLISHED 1842

A-13 CHECK IMPRINTING AND NUMBERING PRESS
B-13 STAMP AND COUPON PERFORATOR
C-13 PERFORATING ASSEMBLIES ONE AND TWO WAY PERFORATING
D-13 PNEUMATIC PAPER FEEDERS FIT ANY MACHINE
E-13 AUTOMATIC DELIVERY LAY-BOY AND JOGGER
F-13 ELECTRONIC INSERTER
G-13 AUTOMATIC COLLATER
H-13 36 INCH SINGLE BLADE FOLDING MACHINE
J-13 PEN RULING MACHINE SINGLE AND DUAL L
K-13 DISC RULING MACHINES STRAIGHT AND DUAL L
L-13 BOOK PAGING MACHINES ELECTRIC AND FOOT POWER

duced. Variations of 1/1000 of an inch in carriage positions are noticeable in critical focusing with the lens nearly wide open. Of course, stopping the lens down will increase the depth of focus, but at the expense of definition and increased exposure, for most lenses provide maximum resolution with the lens closed down only one or two stops below the maximum aperture. A tilt of 1/100 of an inch over a 24″ copy would cause only a .003 or .004 image size variation because of the limited acceptance angle, and this is undoubtedly suitable for the general run of work. It would not however meet mapping or charting accuracy requirements where dimensional tolerances are usually held to within .001″ in 12″.

Similarly a warped, bowed or twisted copyboard or vacuum back may contribute to local geometrical distortion and loss of definition. The straight-edge and feeler gauges can supply your answer there.

We are all aware of what humidity variations will do to film size and are sometimes glad to pay the premium for vinylite or styrene based films to assure dimensional stability of the negative. Yet we are inclined to overlook the fact that paper copy is equally affected and that the dimensional change across the paper grain is three to four times that along the grain. When paper copy is exposed to the heat of the camera lamps for an appreciable time, as during visual focusing or even during exposure, the copy will gradually change its dimensions, and this creeping of the subject may contribute to loss of definition in some areas.

Coming back to our basic definition of a camera as a unit of productive machinery, it is also well to keep in mind that the camera is the starting point in translating the original into a series of reproductions through negative, positive and plate to the printed job on paper. A few extra minutes of care, in positioning and handling of materials, or a few extra dollars spent for initial procurement and maintenance may save hundreds of dollars on a job by reducing art work, touching up on the negatives as well as make-overs of press-plates and lost press time. And you also will have the personal satisfaction of knowing that every negative is indelibly marked with the quality of your craftsmanship.★

PHOTO CLINIC

(*Continued from Page* 95)

side of a thin transparent layer of magnesium fluoride. When a ray of light strikes the first silver film, part is transmitted and part is reflected. The transmitted portion passes through the intermediate layer to the second silver film where again it is partly transmitted and partly reflected. This process is duplicated countless times which gives rise to multiple reflections between the controlling films and results in a great number of emergent beams.

When the magnesium fluoride layer is half a wave length in thickness, each doubling back of a light ray causes it to travel twice this distance with the result that succeeding emergent rays are exactly one wave length apart. Thus, light rays of a particular wave length emerge in such a way that they strengthen or reinforce each other while other wave lengths emerge out of phase and consequently cancel out. The thickness of the film separating the semi-transparent reflecting surfaces determines the color of the light ultimately transmitted.

Interference filters are more efficient separators of light than absorption filters because of an almost negligible loss of energy. In addition, they produce purer colors since they are free of the conflicting absorption and transmission characteristics of colored substances. Interference filters can be used for color separation work but require greater care in their use. A slight difference in the angle between incident ray and filter will influence the emergent color. Interference filters have replaced absorption filters in many modern color measuring instruments, color TV cameras and the like. At the moment, very few applications are being made in the photographic department of the graphic arts.★

GET SPARKLING REPRODUCTIONS WITH WESTERN'S 0000 EXTRA FINE GRAIN

WRITE FOR FACTS

Sharp images—improved clarity. Minimum distortion of halftone dots. Normal water carrying qualities. Balanced performance.

SKILLED CRAFTSMEN
28 YEARS' EXPERIENCE

DIRECT TRUCK DELIVERY FOR PROMPT DEPENDABLE SERVICE
AMERICA'S MOST MODERN PLATE GRAINING PLANT

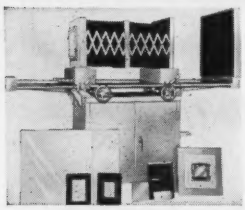
Located at the Crossroads of America

WESTERN LITHO PLATE AND SUPPLY COMPANY
1927 S. THIRD ST.
Phone CHestnut 1-6683
ST. LOUIS 4, MO.

COMPLETE STOCK
NEW ZINC AND
ALUMINUM PLATES

NEW PRINCETON — ENLARGING COPYING & REDUCING CAMERA

11 x 14" to 2¼ x 3¼" and Smaller



Modern — Newly Designed. Substantial Construction. Operates in Both Horizontal and Vertical Positions. Metal Cabinet Stand. Highest Quality in Every Detail. Well Balanced. Easy Operation. Easel or Copy Board for Opaque or Transparent Objects. Available with Standard Size Backs, 11 x 14" to Lantern Slide. Used by Govt. Institutions, etc. Fully Guaranteed. Write Dept. MOLI.

PROCESS LENSES

World's Largest Selection for All Graphic Arts Purposes . . . COOKE — Carl Meyer — Wollensak — etc. 15 day trial — Fully Guaranteed. Complete Lens Lab Facilities . . . Coating, Special Mount, Testing, etc. Write for Special Process List. Dept. MOLI.

Fine Photo Equipment Since 1897

BURKE & JAMES, INC. 321 So. Wabash, Chicago 4, U.S.A.

GRUMBACHER SPEED OPAQUE

FOR NEGATIVES

- No "feather-edges"
- No pinholes • No streaks

Never tacky...even in humid weather.

ONE STROKE COVERING...
FAST DRYING...OPAQUE
...FOR FINE LINE WORK

Opaques right to the Edge

Write for Prices & Free Sample

M. GRUMBACHER INC.

477 W. 33rd St., New York 1, N. Y.

DRY PLATES FILM PHOTO CHEMICALS

Lenses, Contact Screens and accessories for the camera and darkroom

K. SCHLANGER

333 West Van Buren St., Chicago 7, Ill.
WEbster 7540

A-1 USED PRESS EQUIPMENT

Harris 21 x 28 Model LTC
A. T. F. Big Chief 22 x 29
Harris 42 x 58 T. C. Model LTL
Harris 42 x 58 T.C. Model LSK
Harris 42 x 58 4/C Model LTM

Box M Modern Lithography

For good used equipment check

Hoe 52", roll-fed, as is	$ 2,500
Webendorfer-MAC, 17 x 22", as is	4,500
Harris LTC, 21 x 28", as is	6,500
Harris LST, 35 x 45" two-color, as is	45,000
Harris LTL, 42 x 58" two-color, as is	65,000
Harris TRG, 45 x 65" two-color, as is	76,000

Box No. 1, Modern Lithography

W.D.WILSON

PRINTING INK COMPANY LTD.

Fine Printing Inks

LETTERPRESS **LITHOGRAPHY**

Est. 1865

5-38 46TH AVE., LONG ISLAND CITY, N. Y.
TEL.: STILLWELL 4-8432

Call UNIFORM *for superior* PLATE GRAINING

Our service designed to meet your most exacting requirements.

ZINC PLATES — — ALUMINUM PLATES
Ungrained — Grained — Regraining

UNIFORM GRAINING CORP.

648 N. Western Ave. Chicago 12, Ill.
HUMBOLT 6-5512

"OK"ie Developing Ink "OK"ie Negative Opaque

Cameras, Lenses, Screens, Arc Lamps, Printing Frames, Whirlers and Sundries

Write today for prices and full information

E. T. Sullebarger Co.

900 S. WABASH AVE. CHICAGO (5) **110 FULTON ST. NEW YORK (7)**

Classified ADVERTISING

All classified advertisements are charged for at the rate of ten cents per word, $2.00 minimum, except those of individuals seeking employment, where the rate is five cents per word, $1.00 minimum. One column ads in a ruled box, $7.50 per column inch.

Address replies to Classified Advertisements with Box Number, care of Modern Lithography, Box 31, Caldwell, N. J.

Help Wanted:

CHEMIST: Research and development work on lithographic chemicals. Masters degree. Midwest. Address Box 703, c/o *Modern Lithography.*

YOUNG MAN — Technical specialist, B.S. degree, good knowledge mathematics, physics and optics for quality control; excellent opportunity. Reply will be held in strict confidence. Address Box 704, c/o *Modern Lithography.*

QUALIFIED—Two-color pressman and top notch stripper needed for plant in Miami, Florida. Permanent job. Replies confidential. Address Box 706, c/o *Modern Lithography.*

A-1 PRESSMAN: For operation of Harris two-color presses. Must be capable handling finest four-color process work. Good opportunity in first-class city in Southwest. Fine working conditions. Permanent job. Give complete details of your experience, previous connections, earning, and references. Reply will be held in strict confidence. Address Box 707, c/o *Modern Lithography.*

PLATEMAKER, STRIPPER AND CAMERAMAN: For quality two and three color work. Ideal working conditions in modern, air conditioned department. Steady work with overtime. Located in Ohio. Address Box 708, c/o *Modern Lithography.*

HELP WANTED — POSITIONS OPEN

Production Superintendent — Offset MIDWEST $9,000
Sales Manager — Offset-Letterpress SOUTH $10,000-$15,000
Sales Manager—Gravure WEST $8,000-$10,000
Sales Manager — Printing Machinery MIDWEST to $15,000
Asst. Plant Manager — Letterpress offset exp. helpful MIDWEST $7,500
Foreman — Offset Platemaking Trade Shop MIDWEST $6,000
Foreman — Offset Pressroom MIDWEST to $9,000
Foreman — Letterpress Pressroom NEW ENGLAND $5,200-$6,500
Industrial Engineer — Composing room exp. MIDWEST $9,000-$12,000
Industrial Engineer — Folding Cartons SOUTH $7,000

GRAPHIC ARTS EMPLOYMENT SERVICE
Helen M. Winters, Mgr.
Dept. M-6, 307 E. 4th Street
Cincinnati 2, Ohio
List Your Confidential Application With Us

WANTED A-1 STRIPPER, black and white and color work in quality trade shop, using newest equipment. Foreman position a possibility for right man. State qualifications, experience, and salary expected when answering. Location: Central Michigan. Address Box 705, c/o *Modern Lithography.*

WANTED ESTIMATOR: Experienced for Progressive Printing and Lithographing plant. San Francisco Bay area. Must be familiar with complete plant operations. Salary open. Address Box 720, c/o *Modern Lithography.*

Situations Wanted:

DOT ETCHER desires to make change. Seven years experience in fine color lithography. Excellent references. Address Box 709, c/o *Modern Lithography.*

A-1 PRESSMAN: For operation of Big Chief Webendorfer. Eleven years experience in color work with experience in four color process. Could take over as foreman in small plant. Would leave present employment only for advancement. East preferred. Address Box 710, c/o *Modern Lithography.*

YOUNG color craftsman with ideal color background, desires sales opportunity with progressive offset lithographer. Address Box 711, c/o *Modern Lithography.*

FREE SAMPLE—New Scissors and Paste-Pot art service by the originators of creative layout devices. Get copy of new monthly Clipper —all new in size, format, content, ideas—sample, yours to use without cost. Sensational introductory offer. No obligation—no salesmen. Address: Multi-Ad Services, Inc., Box 806A, Peoria, Illinois.

EGA
the RELIABLE Supplier to the Lithographer
for SERVICE call BRyant 9:8480
EASTERN GRAPHIC ARTS SUPPLY CO.
254 W. 31st STREET • N. Y. C.

TECHNICAL SPECIALIST: With outstanding record of achievement as technical advisor. A unique background of practical experience in lithographic production, trouble-shooting and tradetraining. Interested in responsible position with progressive plant involving technical supervision and in-plant training. Would also consider commensurate position with supplier or equipment manufacturer. Address Box 712, c/o *Modern Lithography*

WANTED: A progressive Lithographer who is looking for a technical specialist to assume responsibility for plant improvement in methods, standards and control, with emphasis on color. Box 713, *Modern Lithography.*

TOP-NOTCH CRAFTSMAN SEEKS POSITION AS FOREMAN: Experienced cameraman (from a simple line shot to the finest of color work, masking, method), knowledge dot etching; crackerjack stripper; knowledge of any platemaking procedure . . . Well known, 25 years in the trade; correspondence invited . . . Address Box 721, c/o *Modern Lithography.*

For Sale:

FOR SALE: 44 x 64 Consolidated camera, 58", 133 line circular screen. 47½ lens color corrected. Complete with vacuum back, lamps and overhead track. All electrical equipment is A.C. current. Address Box 714, c/o *Modern Lithography.*

FOR SALE: Levy Screens; 10x120—150 line, 8x10 and 10x12x175 line, 33" Zeiss Apo Tessar Lens—substantial discounts. Gelb 50 and 75 Amp. Overhead Printing Lamps. Singer Engineering Co. for complete plate making equipment, 248 Mulberry St., New York, N. Y.

PUBLIC AUCTION SALE
BOOK PUBLISHING PLANT
By Order of Charles Scribner's Sons
At: 311 WEST 43rd ST., NEW YORK CITY
Tues., June 14, 1955—10:30 A.M.

2—Webendorfer 45" Rotary Rubber Plate Perfector Printing Presses
2—Seybold 57" Power Paper Cutters each with Power Driven Back Gauge
1—Seybold 44" Power Paper Cutter
Large Quantity Material Handling Equipment
Very Large Printing, Bookbinding, Composing Room & Rubber Plate-making departments with its component machinery & equipment, such as is usually found in a large modern book publishing plant.

INSPECTION:
Saturday, June 11th — 10 A.M. to 4 P.M.
Monday, June 13th — 9 A.M. to 5 P. M.
Tuesday, June 14th — 9 A.M. to Sale Time.

SCHWARTZ BROS., AUCTIONEERS
277 Broadway, N. Y. 7, N. Y.
Phone: Worth 4-1370
Write for complete detailed circular.

HERBERT P. PASCHEL
Graphic Arts Consultant
Methods Analysis
In-plant Training
Trouble-Shooting
Color Correction Systems
118 East 28th St.—New York 16, N. Y.
MUrray Hill 6-5566

HELD-UP by MASKING?

Use GRUMBACHER
PATENT RED MASKING INK
FOR ACETATE, VINYLS & ALL OVERLAYS

Permits the artist to "see through" for accuracy of masking or color separation. Photographs black for line cut reproduction. Works with pen, brush, ruling pen and air brush. Easily removed with water from the overlay without leaving color stains.

SEND FOR FREE SAMPLE

M. GRUMBACHER INC

477 W. 33rd St., New York 1, N.Y.

Lithographic Pressman

Journeyman with minimum 4 years' commercial lithographic experience in the operation and maintenance of Web Offset equipment, Hoe Webendorfer or New Era equipment is acceptable. To personally operate and maintain a Hoe Jobber Press, 8½ inch Cut Off, 10 to 14 inch Web and supervise the operation and maintenance by non-American personnel of Davidson Multilith and Rotoprint equipment. For company's printing operation located in Saudi Arabia.

Salary commensurate with background and experience. Write giving full particulars regarding personal history and work experience. Please include your telephone number.

Recruiting Supervisor, Box 55

ARABIAN AMERICAN OIL COMPANY
505 PARK AVENUE
NEW YORK 22, NEW YORK

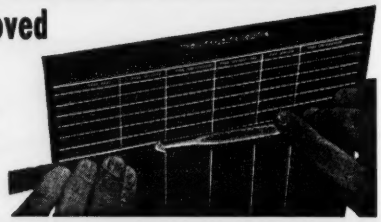
You need the best!

The best plates produce the best printing. Expert offset plate graining saves you money in the long run by permitting quality work and smooth press performance. The skill and experience of ALJEN SERVICE assures the best. Careful and competent handling of your plate problems. Zinc or aluminum plates, any size.

ALJEN ASSOCIATES
1215 Primrose Street Cincinnati 23, Ohio

Efficiency Proved

A Film Scribing Tool
scientifically designed for
Ruling Negatives



Litho Ruled Forms - *QUICKER - EASIER - BETTER*

★ Perfect uniformity of rules—no film spoilage.
★ 6 cutting heads in set: 4 for single rules from hairline to 1-point rules; 2 cutting heads for double rules.
A postcard will bring descriptive literature

Scriber Specialties
1729 East 4th St. Duluth, Minn.

FOR FINEST LITHOGRAPHY **"Lithograin"**

Lithograin assures you careful and competent handling of all your graining and regraining requirements. It also features "Cronak" processing of zinc plates which gives cleaner and longer press runs. Zinc and aluminum offset plates supplied in all sizes.

TOLEDO LITHOGRAIN AND PLATE COMPANY
PHONE GARFIELD 3578 • 714 WASHINGTON • TOLEDO 2, OHIO

OFFSET PLATES
Surface, Deep-Etch and Copper Plates

STEP & REPEAT OFFSET PLATES
UP TO 35" x 45"
MULTIPLE LINE & HALFTONE NEGATIVES
FOR THE TRADE
We Operate No Presses

•

Graphic Arts Service Company
390 Orange St., S.W. ATLANTA, GA.
PHONE: CYpress 5934

LITHOGRAPHIC

wettsal Since 1941

UNUSUAL RESULTS ASSURED FROM CAMERA TO PRESS

USED BY PLATE MAKERS AND PRESSMEN ALL OVER THE U. S. AND IN CANADA.

Sensitizers flow more evenly—plates wash out cleaner. Gum rubs out more smoothly—improves halftones and fine reverse work on the press.

Order $3.00 package NOW

SUN SUPPLY COMPANY
(Div. of Sun Chemical Corp.)
10th St. & 44th Ave., Long Island City 1, N. Y.
Branches in Principal Cities

FOR SALE

PHOTO-COMPOSER

(57" x 72")

Completely rebuilt and guaranteed

Equipped with pre-register device,
4 chases, arc lamp and hoods, priced
less than 50% of new price. Box No. 719

IMMEDIATE DELIVERY

FOR SALE: 1-Roll-fed Offset Perfector, takes roll up to 26" wide, 17⅛ cut-off both sheet and rewind delivery. 1—Headliner with 16 masters. 1—22 x 28 Baum No. 332 folder new in 1953. Address Box 715, c/o *Modern Lithography*.

FOR SALE: Used Wagner offset proving press. Size 24" x 30". Good condition. Can be seen in operation. $500. Address Box 716, c/o *Modern Lithography*.

FOR SALE OR LEASE: One of Florida's finest complete combination offset and letter press color plants. Annual capacity over a million dollars. Big opportunity in this fabulous state. Address Box 717, c/o *Modern Lithography*.

FOR SALE—Small offset printing plant. Completely equipped. Located in Southwest Florida. Address Box 718, c/o *Modern Lithography*.

BUY—Surplus printing presses, equipment, supplies, hundreds other items direct from U. S. Government. Surplus Bulletin $1.00. Box 169CE, East Hartford 8, Conn.

FOR SALE: Mort Dampener Cleaner, 45", model #4, serial #224. Good condition. Reasonable. Write Printing Service Co., 642 S. Main Street, Dayton 2, Ohio.

FOR SALE: Christensen High Speed Bronzer; sheet size 45 x 56; Speed, 3200 per hour; complete with Shaft Drive for L.S.J. Harris Press. 220-440 A.C. 3 Phase Electrical Equipment. A. Carlisle & Co., 645 Harrison Street, San Francisco. 5 years old, seldom used.

Miscellaneous:

COLOR separations for process offset: Halftone positives, negatives made electrically controlled color corrected including dot etching, as low as $99.00 a set, up to 3½ x 5½ size, made in all sizes, proofs available. Color copper cuts for letterpress: Color corrected copper plates including progressive proofs in all sizes up to postcard size for only $99.00—quick service. Send for free samples and price list "4." Moss Photo Service, Inc., 350 West 50th Street, New York 19, N. Y. Serving accounts "to satisfy" from coast to coast since 1935.

FOR SALE

Macbeth Double Arc Ptg. Lamp 35 AMP
Gelb Multiper 35 AMP Arc light
24" Robertson Gallery Camera
24" Directoplate darkroom camera w/scale focusing
33" Zeiss color corrected lens, vacuum back
24x30 Wesel vacuum frame
30x36 Wesel whirler
3—14x17 Levy rectangular screens—150 line—
yellow— 90°
red — 75°
blue —105°
11x14 Pako contact printer
36 cm (Approx.—14") Apo Tessar Zeiss lens
3½" dia. Goerz—Prism lens
4½" Bausch-Lomb lens
Huebner straight line image reverser
O. J. Ianello-Apex Printing Machinery Co., Inc.
Dept. ML, 210 Elizabeth St., N. Y. 12
WO 6-0070

High Gloss Plastic Coating
Lacquering-Varnishing-Gumming
Best Quality & Service
PAPER CONVERTING & FINISHING CO.
118 N. Ada St., Chicago 7, Ill.
Phone Haymarket 1-7904

WANTED—175 or 200 line 31" Glass Etched Circular Screen. Must be in good condition. The Strobridge Lithographing Co., 4530 Montgomery Rd., Cincinnati 12, O.

Epoxy Coatings *(Cont'd from 79)*

class of finishing material available today, it should be stressed that the epoxy-ester coatings, like other roller coating materials, should be evaluated carefully for each intended job. For example, not all finishing varnishes work satisfactorily over all epoxy-ester coatings. Occasional post-fabrication failures on varnished epoxy-ester enamels are believed to be due to fundamental differences in adhesion forces at work when the strained, fabricated film undergoes expansion and contraction changes with changes in ambient storage temperatures. However, epoxy-esters will perform well on more diverse applications than perhaps any other type of coating today available; when all factors are considered.

3. Catalytically Cured

Although the so-called "catalytically cured" epoxy resins have found little, if any, application in the metal decorating industry, a brief description of this newest class of epoxy coatings may be worthwhile. Perhaps metal decorating technologists will find the "catalytically cured" epoxy compositions useful when only low baking temperatures are possible, where high resistance properties of the final film are required and where relatively massive film thicknesses (1.0-1.5 mils. dry) are required. Since the catalysts, ethylene diamine or diethylene triamine, must be added just prior to use (because the mixture may have a pot life of only a few hours), it would seem doubtful that application by roller coating machine would be practical in most cases. Spray applications over most metals from clear lacquers of approximately 40 percent N.V.M., applied at film thicknesses of 1.0-1.5 mils. dry, and baked for 10 min. at 250°F. or 7 min. at 300°F. will produce coatings highly resistant to abrasion, salt spray, boiling water, alcohols, carbon tetrachloride, some acids, some alkalies, some detergent solutions and many miscellaneous chemicals. The flexibility of "catalytically cured" epoxy coatings is only fair, so only mild fabrication should be attempted when this type of epoxy is used.

A very recent addition to the technology of "catalytically cured" epoxy coatings involves the use of polyamide resin catalyst in place of the amine chemicals previously mentioned. When cured with polyamide resins, epoxy compositions have more flexibility, but poorer chemical resistance than when cured through the use of the amine chemicals.

4. Stabilizers for Resins

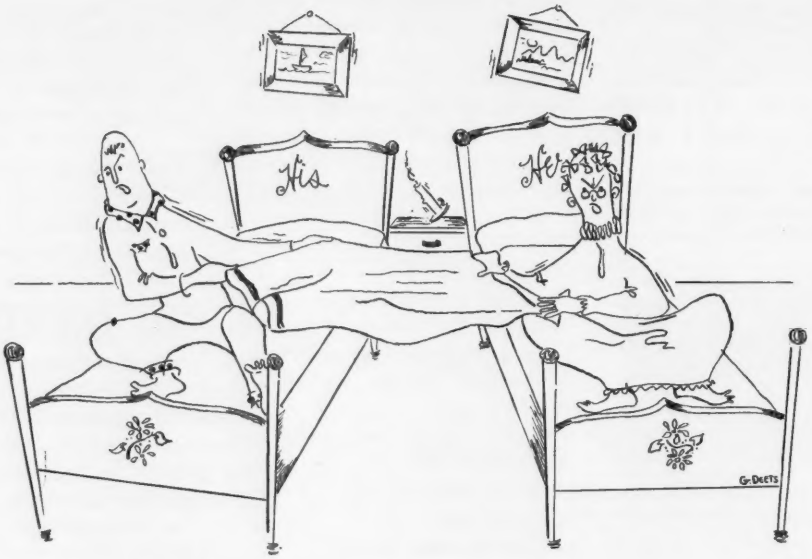
Epoxy resins impart stability to chlorine-containing resins such as those containing vinyl chloride (this includes most of the vinyl type resins commonly used in metal decorating) and chlorinated rubber. The tendency for vinyl coatings on metal to decompose into an unsightly, charred mass when heated to over approximately 300°F. unless suitably stabilized, is only too well known to most metal decorators. The introduction of a relatively small amount of flexible, nontoxic epoxy resin into a vinyl composition, for example, is helpful in reducing or eliminating decomposition troubles completely in many cases.

With new major producers of epoxy resin intermediates coming into the field in the next year or two, and with research and development work in this field being conducted at an unprecedented pace, it seems likely that the great and growing metal decorating industry soon will be using much better, and yet lower priced epoxy coatings of all types.★

Offset Plate Racks
Presses 10x14 to 45x65
Artwork and Flat Cabinets
Write for New Catalog
Foster Mfg. Company
210 N. Broad Street
Philadelphia 2, Pa.

PATCHING • METAL EYELETTING
HIGH SPEED EQUIPMENT FOR PUNCHING and
STRINGING
BOOKLETS, FOLDERS, DIE CUTS and CIRCLES
FOR THE TRADE
STANDARD TAG CO.
ESTABLISHED 1925
65 DUANE ST., NEW YORK 7, N. Y.
WOrth 2-3296

Cover *Two* Beds



With *One* Blanket?

. . . an economical trick, if you can get away with it. But it takes some doing.

. . . like trying to cover letterpress and litho fields with one magazine.

> The "we cover both fields" boys offer an appealing "something for nothing" sales story — "two fields for the price of one". But it's still only a sales story.

You just can't do it — any more than you can cover two beds with one blanket.

So, if it's letterpress printers that you want to reach, use a letterpress magazine. But if it's *lithographers* to whom you sell, invest your advertising budget in a *litho* publication.

And in the litho field the top publication, of course, is

MODERN LITHOGRAPHY

Box No. 31 CALDWELL, N. J.

Index to ADVERTISERS

JUNE, 1955

Aljen Associates 156
Alum-O-Lith, Inc. 35
American Graded Sand Co. 132
American Type Founders, Inc. 21-26
American Zinc Products Co. 150
Amsterdam Continental Types & Graphic Equipment, Inc. 136
Ansco 65
Appleton Coated Paper Co. ..... May
Arabian American Oil Co. 156
Aristo Grid Lamp Products, Inc. 148
Automation Development Corp. ..... Apr.
Azoplate Corp. ..... Apr.

Baker Reproduction Co. ..... May
Bartels, Gordon 148
Baum, Inc., Russell Ernest 144
Beckett Paper Co. ..... Apr.
Bensing Bros. & Deeney 33
Sam'l Bingham's Son Mfg. Co. ..... May
Bingham Brothers Co. 122
Brennan, E. E. Co. ..... May
Bridgeport Engravers Supply Co. 140
Brown, Arthur & Bros., Inc. ..... May
Brown, W. A. Mfg. Co. ..... May
Buckbee-Mears Co. 148
Burke & James, Inc. 154

Cambridge Instrument Co., Inc. ..... Apr.
Cantine Co., Martin ..... 3rd Cover
Central Compounding Co. ..... May
Champion Paper Co. 27, 28
Champlain Co., Inc. ..... May
Chemco Photoproducts Co. 102
Chicago Litho Plate Graining Co. 148
Consolidated Int'l. Equip. & Supply Co. ... 84
Consolidated Water Power & Paper Co. 87
Corn Products Refining Co. 127
Craftsman Line-Up Table Corp. 113
Cramer Dry Plate Co. ..... May
Crescent Ink & Color Co. ..... May
Cross Siclare & Sons, Inc. ..... May
Curtis Paper Co. 128

Dayton Rubber Corp. ..... May
Dennison Mfg. Co. 126
Dexter Folder Co. 64
Di-Noc Co. ..... May
Direct Reproduction Corp. ..... Mar.
duPont de Nemours & Co., E. I. ..... May

Eastern Corp. 98
Eastman Kodak Co. 59
Electronic Mechanical Products Co. 150
Eskay, Inc. 147

Falulah Paper Co. 132
Fitchburg Paper Co. 32
Flint Ink Co., Howard 6
Fox River Paper Corp. 30
Frangos, Wm. A., Inc. ..... May
Fraser Paper, Ltd. 117

Gaetjens, Berger & Wirth, Inc. ..... May
Gegenheimer Co., Wm. 74
General Plate Makers Supply Co. 126
General Research & Supply Co. ..... May
Gevaert Co. of America Inc. ..... May
Gilbert Paper Co. ..... May
Glidden Co., The 91
Godfrey Roller Co. 60
Goerz American Optical Co., C. P. 137
Graphic Arts Corp. of Ohio 128
Graphic Arts Employment Service 135
Graphic Arts Machinery ..... May
Graphic Arts Service Co. 156
Graphic Plate Graining Co. ..... May
Graphic Publishing Co. ..... May
Grumbacher M., Inc. 154, 156
Gummed Products Co. 12

Hamilton & Son, W. C. ..... May
Hammermill Paper Co. 67-68
Handschy Co., A. E. 138
Harris-Seybold Co. ..... 88, 89, 4th Cover
Hill Rubber Co., Inc. ..... May
Hoe, R. & Co. 8
Howard Paper Co. 19, 20
Hunt Co., Philip A. 100

Ideal Roller & Manufacturing Co. 92
Illinois Zinc Co. 150
Interchemical Corp., Printing Ink Div. ... Apr.
International Press Cleaner & Mfg. Co. .. 140
International Paper Co. 72
Intertype Corp. 4

Jomac Products 81

Kimberly-Clark Corp. 104, 105
Kleen-stik Products, Inc. 149
Knox Soap Co. 9
Krug Electric Co., Inc. ..... May

LaMonte & Son, George 80
Lawson Co., E. P. 7
Leedal Stainless Steel Products, Inc. 150
Litho Chemical & Supply Co. 29
Lithographic Plate Graining Co. of America 134
Lithographic Plate Grainers Assn., Inc. ... 134

Macbeth Arc Lamp Co. 139
Maigne, O. J., Co. ..... May
Mallinckrodt Chemical Works 108
McAdams & Sons, John 146, 152
McLaurin-Jones Co. 16
Mead Corp., The 11
Miehle Printing Press & Mfg. Co. 14
Miller Printing Machinery Co. ..... May
Minnesota Mining & Manufacturing Co. ... 94
Mohawk Paper Mills, Inc. ..... May
Moore Laboratories ..... May
Mort, Ralph H., Co. 10
Murphy & Co., Inc., Daniel 144

National Assn. of Photo-Lithographers ... 34
National Carbon Co., Div. of Union Carbide & Carbon Co. 129
National Steel & Copper Plate Co. 143
Neenah Paper Co. ..... May
Nekoosa Edwards Paper Co. 36
New York & Pennsylvania Co. 107
N. Y. Printers & Bookbinders Mutual Insurance Co. ..... May
Northwest Paper Co. ..... Mar.
nuArc Co., Inc. ..... May
Nuclear Products Co. ..... Apr.

Offen & Co., B. ..... May
Oxford Paper Co. 85, 86
Oxy-Dry Sprayer Corp. ..... Apr.

Paper Manufacturers Co. ..... May
Paul, J. C., Co. ..... May
Photo Litho Plate Co. 146
Pitman, Harold M., Co. 17
Pope & Gray Inc. ..... May
Progressive Lithography Service, Inc. ..... May
Pyroxylin Products Co. ..... May

Rapid Roller Co. 15
Recht Co., Inc., William 142
Repro Graphic Machines, Inc. 142
Roberts & Porter, Inc. 3
Roberts, Lewis, Co. 82
Rogers Co., The Harry H. 131
Roll-O-Graphic Corp. 152
Rosback Co., F. P. ..... May
Rutherford Machinery Co. 138

Saltzman, J. G., Inc. ..... May
Schlanger, K. 154
Schmidt, H. & Co. ..... May
Schultz, H. J. 144
Scranton Plastic Laminating Co. 145
Scriber Specialties 156
Senefelder Co. ..... 2nd Cover
Siebold, J. H., & G. B., Inc. 90
Sinclair & Carroll Co., Inc. 70
Sinclair & Valentine Co. 18
Skokie Colorgraph Co. ..... May
Stockinger & Langbein Photo Litho Corp. May
Strathmore Paper Co. 121
Stevenson Photo Color Separation Co., The 152
Strong Electric Corp. 119
St. Regis Paper Co. ..... May
Sullebarger Co., E. F. 154
Sun Chemical Corp. 13

Tapley, J. F. Co. ..... May
Teitelbaum Sons, N. 141
Tickle Engineering Works, Inc., Arthur .. May
Toledo Lithograin & Plate Co. 156
Trenton Times 146

Uniform Graining Corp. 154
U. S. Rubber Co. 31

Vulcan Rubber Products, Inc. ..... Mar.

Wagner Litho Machinery Div. 76
Warren Co., S. D. 61, 62
Western Litho Plate & Supply Co. 153
Weston Co., Byron 114
West Va. Pulp and Paper Co. 110, 111
Wettsall Co. 156
Willy's Plate Graining Corp. 152
Wilson Printing Ink Co., W. D. 154
Winsor & Newton, Inc. 136

York Display Finishing Co. ..... May
Young Brothers Co. 78

Zarkell & Becker ..... May

(The advertisers' Index has been carefully checked but no responsibility can be assumed for errors or omissions.)

Tale Ends

LITHOGRAPHERS who follow the fights on radio and TV may have been wondering if the "William Recht" announced as judge of many New York fights is the man who services their industry with litho supplies. The head of William Recht Co., Inc., graphic arts specialists, is indeed the man who has decided many a fight in his more than 10 years on the New York State Athletic Commission. Years ago he was a second for lightweight John Rosner, and he's been interested in boxing ever since. He has judged fights involving Sugar Ray Robinson, Roland LaStarza, Randy Turpin and many others.

ml

If you think the offset process has its complications, consider the process developed by Burroughs Corp. for printing the output of electronic computers. Dr. Herman Epstein, of Burroughs Research Center, reported that the company's electrographic recording process will print the calculations of "electronic brains" at the rate of 5,000 characters a second.

Here's how it works: characters take the form of a pinpoint pattern of electrostatic charges on the surface of a cheap coated paper. The pattern is made visible when the paper is passed through a dry ink bath, tiny particles of powdered ink clinging to the pinpoint areas of the charges. Next the paper goes through a third unit where a temperature controlled hot plate fixes the ink, making it fade proof and smudge proof.

The business machine company stated that the model is only in the laboratory stage and is being used as the basis for further research. Components of the printing unit can fit into a man's suitcase.

ml

It's Buck, Beethoven, and Brahms.

A series of Radio Concerts recently was presented by the Buck Printing Company, Boston offset and letterpress firm, broadcast over WXHR 96.9 on the F.M. dial. So great was the response that Douglas F. Reilly, general manager, decided to continue the series for the remainder of the year. The concerts are presented every Thursday from 8 to 9 p.m. as a public service.

Presentation of classical music by this 103-year-old printing company follows a tradition first established in Boston by businessmen who made possible the founding of such great musical organizations as the Handel and Haydn Society, the New England Conservatory of Music, and the Boston Symphony Orchestra.

ml

Walter L. Howe, director of design and typography for R. R. Donnelley & Sons Co., Chicago, last month completed 25 years of service with the firm. Starting as an artist and designer in the photoengraving department, he assumed his present post in 1946. He is a past president of the Chicago Society of Typographic Arts and the Chicago Art Directors Club and has served as a regional vice president for American Institute of Graphic Arts.★

Look, No Hands!

SURE, you can ride a bicycle no hands, maybe you can light a fire without matches — or perhaps run your sales figures up without advertising.

But why try to do everything the hard way?

The tried and tested method of paving the way for your salesmen, making their job easier and more productive when they finally get in to see the prospects, is to soften them up in advance with an effective advertising program. And no medium can do the job as well for you in the lithography field as

MODERN LITHOGRAPHY

BOX 31 **CALDWELL, N. J.**

Member, Audit Bureau of Circulations

"Through Narrows to Riches" by Edw. Wilson

OFFSET-LITHO
Hi-Arts Litho C. 1S.
Zenagloss C. 2S.
Zenagloss Cover C. 2S.
Lithogloss C. 1S.
Catskill Litho C. 1S.
Catskill Offset C. 2S.
Esopus Postcard C. 2S.
Esopus Tints C. 2S.

Plan for Quality: The manner of your approach through printing largely determines the success of your mission. The use of fine photographs, beautifully reproduced on *coated* paper like Cantine's, tends to widen narrow doors.

LETTERPRESS
Hi-Arts
Ashokan
M-C Folding Book
M-C Folding Cover
Zena
Catskill
Velvetone
Softone
Esopus Tints
Esopus Postcard

Cantine's COATED PAPERS

THE MARTIN CANTINE COMPANY, *Specialists in Coated Papers Since 1888* • SAUGERTIES, N. Y. and NEW YORK CITY

Deep Etch Chemicals

Counter etch, Higravity and Hidensity coatings, stop-out solution, developers, etches, lacquers, asphaltum, inks and plate-cleaning solution.

Surface Chemicals

These Harris surface chemicals include V-coat and Q-coat Platemaking Solutions, surface plate developing inks and lacquers.

Sensi-Plates; 3 in 1 Solution

To process a pre-sensitized, photo-offset Harris Sensi-Plate, just rub on 3 in 1 Solution . . . then wipe it off.

Press Chemicals

Always follow through with Harris Hydro Etch, Lovisgum, Litho Asphaltum, Lithwash and Triple Ink for better press runs.

Harris-Seybold Company, Chemical Division F
5308 Blanche Ave., Cleveland 27, Ohio

☐ Please send me Ions and Images, the illustrated story of the quality control for Harris litho-chemicals.

☐ Also send me information about Harris Sensi-Plates and 3 in 1 Solution.

MR. _____

COMPANY _____

STREET _____

CITY _____ ZONE ____ STATE _____

Ion-exchange column purifies gum solution

Get professional quality every time with Harris lab-controlled chemicals

No rocket to Mars, this! It's an ion-exchange column that purifies our gum solution . . . one of the components of deep etch coating. The technician is making a simple, on-the-spot test for impurities. And his test is rechecked by even more accurate laboratory methods.

Here is but one example of the thoroughness of Harris quality control, the most painstaking in the litho-chemical field. It starts with control of such minute particles as ions . . . and extends to tests throughout the guaranteed shelf life of the chemicals.

That's why you can depend on *one* standard of quality and performance in each of your Harris chemicals. We offer a complete line of deep etch chemicals, surface chemicals, press chemicals . . . plus pre-sensitized plates and their processing solution. Some of these are shown at the left.

You'll get professional results every day, saving money and time, by using Harris packaged chemicals consistently. Call your nearest Harris dealer or mail the coupon for additional information.

HARRIS SEYBOLD COMPANY

HARRIS CHEMICALS

Harris Presses • Seybold Cutters • Harris Litho-Chemicals
Special Products • Cottrell Presses • Platemaking Equipment
Macey Collators